DEPARTMENT OF TRANSPORT

NO. R. 984 **21 SEPTEMBER 2018**

CIVIL AVIATION ACT, 2009 (ACT NO. 13 OF 2009)

NINENTEENTH AMENDMENT OF THE CIVIL AVIATION REGULATIONS, 2018

I, Bonginkosi Emmanuel Nzimande, Minister of Transport hereby, in terms section 155(1) of the Civil Aviation Act, 2009, (Act No. 13 of 2009), make the Regulations set out in the Schedule hereunder.

Dr BE Nzimande, MP
Minister of Transport
Date: 19/07/2018

SCHEDULE

CIVIL AVIATION ACT, 2009 (ACT NO.13 OF 2009)

NINENTEENTH AMENDMENT OF THE CIVIL AVIATION REGULATIONS, 2018

GENERAL EXPLANATORY NOTE:

[ ] Words in bold type in square brackets indicate omissions from existing regulations.

_____ Words underlined with a solid line indicate insertions in existing regulations.

Definition

1. In this Schedule "the Regulations" means the Civil Aviation Regulations, 2011 published by Government Notice No. R. 425 dated 1 June 2012, as amended.

Amendment of Part 1 of the Regulations

2. Part 1 of the Regulations is hereby amended by –
   (a) the deletion in regulation 1.01.1 of the definition of "student pilot licence integrated course";
   (b) the substitution for the definitions of "corporate aviation operating certificate" and "corporate aviation operation" of the following definitions:

"""**corporate aviation operating certificate"** means a certificate issued by the Director to authorise a corporate aviation operation **[authorising an operator of a non-commercial operation to operate aircraft on behalf of a company in which the carriage of passengers or goods is an aid to the conduct of company business]**;

"corporate aviation operation" means **[the]** a non-commercial **[operation or]** use of aircraft by, or on behalf of a person **[company]** for the carriage of passengers or goods as an aid to the conduct of **[company]** that person's

business [, **flown by a professional pilot(s) employed to fly the aircraft**];" and

(b) the insertion in regulation 1.01.2 after the abbreviation of "SMSM" of the following abbreviation:

"'**SPIC**' means student pilot in command;".

Amendment of Part 11 of the Regulations

3. Part 11 of the Regulations is hereby amended by –

(a) the substitution for regulation 11.01.2 of the following regulation:

"Publication of AICs

11.01.2 The Director may publish an AIC **[AICs]** containing information **[on technical standards, practices or procedures which the Director finds to be acceptable for compliance with the associated regulation]** prescribed in Document SA-CATS 175.";

(b) the substitution in sub-regulation (2) of regulation 11.04.2 for paragraph (b) of the following paragraph:

"(b) processed within **[14]** 15 working days from the date of submission thereof unless the circumstances of the exemption dictates otherwise.".

Amendment of Part 47 of the Regulations

4. Part 47 of the Regulations is hereby amended by –

(a) the substitution in sub-regulation (2) of regulation 47.01.1 for paragraph (c) of the following paragraph:

"(c) unmanned free balloons without a payload.";

(b) the insertion in regulation 47.01.7 after sub-regulation (2) of the following sub-regulation:

"(3) In the case of unmanned free balloon, the register shall contain at least the following particulars:

(a) date and time of release;

(b) location of release;

(c) type of balloon;

(d) name of the operator;

(e) postal and physical address and other possible contact details such as telephone and email of the holder of the certificate of registration; and

(f) nationality and registration marks of the unmanned free balloon.".

Amendment of Part 61 of the Regulations

5. Part 61 of the Regulations is hereby amended by –

(a) the substitution in sub-regulation (7) of regulation 61.01.8 for paragraph (e) of the following paragraph:

"(e) a **[student pilot in command (SPIC)]** SPIC **[when]** and acting as PIC under the supervision of an appropriately rated flight instructor during flight training on an approved course of CPL or CPL/IR training and for a successful CPL or IR initial flight test: Provided that –

(i) the **[To act as SPIC the student must be rated on the aircraft]** SPIC time shall not be credited as PIC time **[unless]** if the flight instructor had reason to influence or control any part of the flight;

(ii) a ground debriefing by the flight instructor does not affect the crediting as PIC;

(iii) SPIC time will be logged in the PIC column with "SPIC" indicated in the remarks column and certified by the supervising flight instructor.";

(b) the substitution in regulation 61.02.5 for sub-regulation (2) of the following sub-regulation:

"(2) Notwithstanding the provisions of sub-regulation (1)**[(e)]**, a student undergoing the integrated training may exercise the privileges of his or her SPL also –

(a) in VMC by night, if he or she is **[the]** a holder of a valid night rating; **[and]**

(b) under IFR, if he or she is **[the]** a holder of a valid instrument rating**[.]**; and

(c) to carry student pilots undergoing integrated training at the same ATO for the purpose of navigation training, if he or she –

(i) has passed the VFR navigation progress test as prescribed in Document SA-CATS 61, Appendix 3.0 or Appendix 3.B as applicable; and

(ii) is specifically authorised by a Grade I or Grade II flight instructor.";

(c) the substitution in regulation 61.02.1 for paragraph (b) of the following paragraph:

"(b) hold a valid **[Class 1 or 2]** medical certificate issued in terms of Part 67;";

(g) the substitution in regulation 61.02.2 for paragraph (c) of the following paragraph:

"(c) a valid **[Class 1 or Class 2]** medical certificate issued in terms of Part 67;";

(d) the substitution in regulation 61.02.4(2) for paragraph (a) of the following paragraph:

"(a) is in **[the]** possession of a valid **[Class 1 or Class 2]** medical certificate, issued to him or her in terms of Part 67; and";

(e) the substitution in regulation 61.03.1 for paragraph (b) of the following paragraph:

"(b) hold a valid **[Class 1 or Class 2]** medical certificate, issued in terms of Part 67;";

(f) the substitution in regulation 61.03.2(2) for paragraph (a) of the following paragraph:

"(a) a valid **[Class 1 or Class 2]** medical certificate, issued in terms of Part 67;

(g) the substitution in regulation 61.03.2 for sub-regulation (4) of the following sub-regulation:

"(4) A PPL(A) must be issued in the appropriate prescribed form**[, as]**.";

(h) the substitution in regulation 61.03.5(1) for paragraph (a) of the following paragraph:

"(a) is in possession of a valid **[Class 1 or Class 2]** medical certificate, issued to him or her in terms of Part 67;";

(i) the substitution in regulation 61.04.1(1) for paragraph (b) of the following paragraph:

"(b) hold a valid **[Class 1 or Class 2]** medical certificate, issued in terms of Part 67;";

(j) the substitution in regulation 61.04.2(2) for paragraph (a) of the following paragraph:

"(a) a valid **[Class 1 or Class 2]** medical certificate, issued in terms of Part 67;";

(k) the substitution in regulation 61.04.5(1) for paragraph (a) of the following paragraph:

"(a) is in possession of a valid **[Class 1 or Class 2]** medical certificate, issued to him or her in terms of Part 67;";

(l) the substitution in regulation 61.05.1(1) for paragraph (a) of the following paragraph:

"(b) hold a valid **[Class 1]** medical certificate, issued in terms of Part 67;";

(m) the substitution in regulation 61.05.2(2) for paragraph (a) of the following paragraph:

"(a) a valid **[Class 1]** medical certificate, issued in terms of Part 67;";

(n) the substitution in regulation 61.05.5(**1**) for paragraph (a) of the following paragraph:

"(a) is in possession of a valid **[Class 1]** medical certificate, issued to him or her in terms of Part 67;";

(o) the substitution in regulation 61.06.1(1) for paragraph (b) of the following paragraph:

"(b) hold a valid **[Class 1]** medical certificate, issued in terms of Part 67;";

(p) the substitution in regulation 61.06.2(2) for paragraph (a) of the following paragraph:

"(a) a valid **[Class 1]** medical certificate, issued in terms of Part 67;";

(q) the substitution in regulation 61.06.5(1) for paragraph (a) of the following paragraph:

"(a) is in possession of a valid **[Class 1]** medical certificate, issued to him or her in terms of Part 67;";

(r) the substitution in regulation 61.11.2(1) for paragraph (c) of the following paragraph:

"(c) hold a valid **[Class 1 or 2]** medical certificate issued in terms of Part 67;".

Amendment of Part 66 of the Regulations

6. Part 66 of the Regulations is hereby amended by the substitution in regulation 66.02.10(2)(b) for sub-paragraph (iii) of the following sub-paragraph:

"(iii) any installation and maintenance of propellers and the reassembly of variable-pitch propellers which may have been dismantled for transport purposes, excluding the overhaul, major modification or major repair of propellers; and".

Amendment of Part 68 of the Regulations

7. Part 68 of the Regulations is hereby amended by the numbering of the existing sub-regulation as sub-regulation (1) and the insertion after sub-regulation (1) of the following sub-regulations:

"Crediting of flight time

68.02.9 (1) A student glider pilot shall be entitled to be credited in full with all solo and dual instruction flight time towards the total flight time requirement for the initial issue of a glider pilot licence.

(2) A holder of a national pilot licence for an LSA aeroplane or a Part 61 licence for an aeroplane may be credited with all flight hours and theoretical training in order to obtain a glider pilot licence if such a holder has completed –

(a) a minimum of 5 hours practical conversion training in a glider;
(b) a minimum of 5 thermal hours training; and
(c) glider theoretical examination.

(3) A pilot with a Part 61 touring motor glider rating or Part 62 touring motor glider rating may undertake a combined practical conversion in a glider and thermal hours training within a minimum of 5 hours.

Substitution of Part 93 of the Regulations

8. Part 93 of the Regulations is hereby substituted by the following Part:

"PART 93: CORPORATE AVIATION OPERATIONS AND HIGH PERFORMANCE AIRCRAFT

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SUBPART 1: GENERAL

Applicability

3.01.1 (1) Subject to the provisions of sub-regulation (2), this Part applies to an operation of an aircraft registered in the Republic that is used in corporate aviation operation if an operation involves a use of three or more aircraft, of which at least two aircraft conform to the following requirements:

(a) an aeroplane with a MCM exceeding 5 700kg, or a helicopter which has a MCM exceeding 3 180kg; or

(b) an aircraft which is equipped with one or more turbine powered engines.

(2) This Part does not apply to –

(a) NTCA or an aircraft that is required to be operated under Part 121, 127, 135 or 141 of these regulations;

(b) aircraft sales company or aircraft sales division of an organisation when dealing with the following operations-

(i) positioning flight;
(ii) flight for demonstration; and
(iii) flight for a customer with a sole purpose of selling an aircraft.".

(3) A person operating under this Part shall also comply with all provisions of Part 61 and 91.

SUBPART 2:
OPERATIONS PERSONNEL REQUIREMENTS

Division One: Flight crew member qualifications and requirements

Composition of flight crew

93.02.1 (1) A CAO shall, when a type of operation so requires, allocate additional flight crew members as specified in its operations manual.

(2) A flight crew shall include at least one member who is proficient in navigating over a route to be flown using equipment required for such navigation.

(3) A CAO shall designate a PIC for each flight.

(4) When a separate flight engineer's station is incorporated in a design of an aircraft, at least one flight engineer should be assigned to that station, unless the duties associated with that station can be satisfactorily performed by another flight crew member, holding a flight engineer license issued in terms of Part 63 of these regulations, without interference with that flight engineer's regular duties.

Minimum requirements for assignment as PIC

93.02.2 (1) A CAO shall develop and publish requirements for minimum flight time for assignment and operating experience for a PIC as prescribed in Document SA-CATS 93.

(2) requirements for flight time assignment and operating experience referred to in sub-regulation (1) shall be incorporated in an operations manual.

Flight crew member emergency duties

93.02.3 (1) A flight crew member shall not accept an assignment of emergency duties on an aircraft unless such flight crew member has been instructed in the performance of such emergency duties and has undergone the required initial and recurrent training in accordance with subpart 3 of this Part.

(2) A CAO's training programme shall include –
(*a*) instructions in the use of all emergency and lifesaving equipment required to be carried on board an aircraft; and

(*b*) aircraft emergency evacuation drill.

Area, route and aerodrome familiarisation

93.02.4 (1) A CAO shall establish and implement procedures to ensure that a PIC is familiar with an area, route and aerodrome over or into which he or she is to operate.

(2) Procedures referred to in sub-regulation (1) shall be incorporated in an operations manual.

Flight crew member qualifications

93.02.5 (1) Subject to sub-regulation (4), an operator shall not assign a person to act and no person shall act as the PIC or second-in-command of an aircraft unless the person—

(*a*) is the holder of valid licence, rating and certificate appropriate to his or her assignment; and

(*b*) has completed the training and checking requirements specified in subpart 3 as appropriate to the intended flight.

(2) A pilot who does not meet the recency requirements of regulation 91.02.4 or whose training and checking validity periods have lapsed, shall regain competency only after satisfying the regaining competency requirements specified in subpart 3 of this Part.

(3) Where a person does not meet the requirements of sub-regulation (1), a CAO may only permit such person to act as a PIC or second-in-command of an aircraft when operated for training, ferry or positioning flight.

Division Two: Requirements for personnel other than flight crew

Requirement for flight followers

93.02.6 (1) A CAO shall define its standards to ensure that a person responsible for flight following is suitably qualified and competent.

(2) Standards referred to in sub-regulation (1) shall be incorporated in an operations manual.

Ground personnel qualifications

93.02.7 (1) A CAO shall, when necessary, employ ground personnel to provide essential ground support services appropriate to aircraft and type of service being operated.

(2) A CAO shall ensure a person assigned to provide direct service to an aircraft or any passenger, cargo or mail intended to be carried aboard such aircraft, is trained and qualified as appropriate to his or her assignment.

Cabin crew member complement

93.02.8 (1) An aircraft certified to carry more than 19 passengers may not be operated with a passenger on board unless—

(*a*) one or more cabin crew members have been assigned to duty; and

(*b*) a minimum number of cabin crew members assigned to a flight is not less than that prescribed in Document SA-CATS 121, notwithstanding the actual number of passengers on board an aircraft.

(2) Notwithstanding the provisions of sub-regulation (1) and taking into account a size, complexity and physical layout of an aircraft, the Director may, notwithstanding an aircraft's certificated seating capacity—

(*a*) require one or more cabin crew members licensed in terms of Part 64 to be assigned to duty; or

(*b*) require an operator to demonstrate a capability to provide an equivalent level of safety as would be achieved under paragraph (*a*).

(3) A cabin crew member shall give priority to performance of duties relating to safety of passengers as may be assigned by an operator or a PIC.

(4) In unforeseen circumstances, an operator may reduce a required minimum number of cabin crew members: provided that a number of passengers has been reduced in accordance with procedures specified in its operations manual and shall file a report with the Director after completion of that flight.

(5) Where a cabin crew member is not legally required, a PIC shall remain responsible for all safety related duties and shall conduct safety briefing and notify passengers that he or she is ultimately responsible for the use of all safety or emergency equipment.

Operation on more than one type or variant by cabin crew member

93.02.9 (1) A cabin crew member may not operate on more than three aircraft types unless otherwise authorized by the Director.

(2) The Director may only approve an operation on a fourth aircraft type for a crew member if at least two of aircraft types concerned have similar emergency and safety equipment and procedures and based on factors prescribed in Document SA-CATS 121.

Senior cabin crew member

93.02.10 (1) A CAO shall appoint a senior cabin crew member whenever more than one cabin crew members are carried on board an aircraft operated under this Part.

(2) A senior cabin crew member shall be responsible to the PIC for the conduct of cabin operations and co-ordination and performance of safety duties.

(3) A CAO shall establish procedures to select a qualified cabin crew member to operate as senior cabin crew member in an event a nominated senior cabin crew member is unable to perform his or her duties.

Cabin crew member emergency duties

93.02.11 (1) A CAO, and where appropriate, a PIC shall assign to each cabin crew member necessary functions to be performed in an emergency or a situation requiring emergency evacuation.

(2) Assignment of functions referred to in sub-regulation (1) shall ensure that any reasonably anticipated emergency can be adequately dealt with and shall take into consideration a possible incapacitation of individual flight and cabin crew member.

(3) A CAO shall submit proof to the Director that adequate procedures to accomplish an evacuation required by regulation 91.02.2 have been adopted and demonstration has been carried out in accordance with the requirements prescribed in Document SA-CATS 121.

(4) A CAO shall carry out an emergency evacuation demonstration referred to in sub-regulation (3) when a new type or variant of aircraft or new configuration of an existing aircraft is introduced for use and has not been certified under a certification process prescribed in Document SA-CATS 121.

(5) Passengers may not be carried in an aircraft unless an operator has first conducted, to the satisfaction of the Director, an actual full-capacity emergency evacuation demonstration for that aircraft type, model and configuration in 90 seconds or less.

(6) The Director may approve a partial-capacity demonstration in lieu of a full-capacity demonstration where an operator can produce evidence that—

(*a*) a satisfactory full-capacity emergency evacuation for an aircraft to be operated was demonstrated during an aircraft type certification or during a certification of another operator; or

(*b*) there is an engineering analysis, which shows that an evacuation is still possible within the 90 second standard, if an aircraft configuration differs with regard to a number of exits or exit types or number of cabin crew members.

(7) Emergency evacuation procedures referred to in sub-regulation (1) shall be contained in a CAO's operations manual and shall form part of an operator's emergency training programme.

(8) A CAO may not assign a flight or cabin crew member to perform any emergency function unless such crew member has been trained to perform emergency functions in accordance with an operator's approved emergency training programme.

(9) A flight or cabin crew member may not accept an assignment of duty to perform any emergency functions unless such crew member has been trained to perform emergency functions in accordance with an operator's approved emergency training programme.

Seating of cabin crew members during flight

93.02.12 During take-off and landing, and whenever deemed necessary by a PIC in the interests of aviation safety, cabin crew members shall be seated at their assigned stations or seats, on all decks that are occupied by passengers.

Division Three: Flight time and duty limitations

Flight time and duty period scheme

93.02.13 (1) A CAO shall establish a flight and duty scheme that should be published in its operations manual.

(2) Flight and duty scheme referred to in sub-regulation (1) shall comply with flight time and duty period limitations, rest periods and days free of duty, prescribed in Document SA-CATS 93.

(3) Notwithstanding the provisions of sub-regulation (2), the Director may, subject to the provisions of Regulation 93.02.14, approve a flight and duty scheme consisting of a system of flight time and duty period limitations, rest periods and days free of duty proposed by an operator where the Director is of the opinion that an equivalent level of safety will be achieved.

(4) A CAO may not assign a flight crew member if such assignment will not be in compliance with the provisions of flight and duty scheme referred to in sub-regulation (1).

(5) A flight crew member may not accept a flight assignment when he or she knows or has been made aware that such flight assignment will cause him or her to exceed a flight and duty scheme applicable to that flight or if he or she is suffering from or, is likely to suffer from fatigue which may endanger a safety of an aircraft or its flight crew members and passengers.

(6) Where a flight crew member is aware of any reason they would be in violation of a flight and duty scheme referred to in sub-regulation (2), that crew member shall, without delay, inform appropriate management personnel, a duty crew scheduler of an operator or a person responsible for operational control over that flight.

(7) Where any flight crew member is aware of any reason they would be in violation of flight and duty scheme referred to in sub-regulation (3), that crew member shall, without delay, inform a PIC.

(8) A PIC shall be responsible to ensure compliance with a flight and duty scheme referred to in sub-regulation (3).

Fatigue risk management system

93.02.14 (1) A CAO who establishes a flight and duty scheme in accordance with regulation 93.02.13(3) shall establish a fatigue risk management programme that

ensures that all operator personnel involved in an operation and maintenance of aircraft do not carry out their duties when fatigued.

(2) A fatigue risk management programme referred to in sub-regulation (1) shall be incorporated in an operations manual and shall meet the requirements prescribed in Document SA-CATS 93.

(3) A fatigue risk management system established in terms of sub-regulation (1) shall be integrated with SMS and shall be based on scientific principles, knowledge and operational experience with the aim of ensuring that flight crew and cabin crew members are performing at an adequate level of alertness.

(4) A CAO shall designate a person responsible for fatigue risk management system who meets qualifications and experience requirements, and who will be responsible for functions prescribed in Document SA-CATS 93.

Approval of a fatigue risk management system

93.02.15 (1) A CAO required to establish a fatigue risk management system shall submit a proposed fatigue risk management system to the Director for approval.

(2) The Director shall approve a commencement of a trial phase for implementation of a proposed fatigue risk management system referred to in sub-regulation (1) for a trial period of up to 36 months if the Director is satisfied that an operator has complied with prescribed requirements.

(3) At any time during a trial phase, the Director may withdraw an approval if it becomes evident that an operator does not comply with the provisions of a system or the regulations.

(4) During the trial phase the operator may implement the proposed maximum and minimum flight time and duty values, as determined by the operator and approved by the Director.

(5) A CAO may after a period of 24 months of approval under sub-regulation (2), apply to the Director for full approval by providing evidence that a fatigue risk management system is delivering required safety outcomes.

(6) The Director may issue a full approval to implement a fatigue risk management system if satisfied with evidence provided under sub-regulation (5).

Fatigue risk management system manual

93.02.16 (1) A CAO required to establish a fatigue risk management system shall draw up a fatigue risk management system manual containing all the information required under this Part.

(2) A fatigue risk management system manual referred to in sub-regulation (1) shall be incorporated in an operations manual and shall meet the requirements as prescribed in Document SA-CATS 93.

SUBPART 3:
TRAINING AND CHECKING

Division One: General provisions for a CAO

Training and checking program

93.03.1 (1) A CAO shall establish and maintain a ground and flight training program that includes a checking program, either through its internal programs or through an ATO approved in accordance with Part 141of these regulations.

(2) A training program referred to in sub-regulation (1) shall –

(a) be described in an operations manual;

(b) include training to ensure competency for operating all equipment installed;

(c) comply with the requirements prescribed in Document SA-CATS 93;

(d) include a system of record keeping as prescribed; and

(e) be submitted to the Director for approval.

(3) A CAO shall ensure that each person shall, prior to assignment on duty, whether employed on a full-time or part-time basis –

(a) receive training as appropriate to his or her duties in accordance with the provisions in Document SA-CATS 93; and

(b) complete, as necessary, a skills test or other comprehension assessment acceptable to the Director.

(4) A CAO shall keep training records and retain them as provided in regulation 93.04.6.

Division Two: Flight crew member training

Flight crew member training

93.03.2 (1) A CAO shall ensure that every flight crew member is provided with ground and flight training as appropriate to its operation and type of aircraft operated.

(2) Training referred to in sub-regulation (1) shall include at least the following training components—

(a) crew resource management training including human factors, risk analysis and error management training;

(b) cabin safety procedures, emergency equipment procedures and security training;

(c) initial and recurrent aircraft type ground and flight training;

(d) regaining recency;

(e) regaining qualification training;

(f) company induction training to its flight crew members;

(g) line induction training on an aircraft with an MTOM of greater than 5 700kg following initial training or upgrade training;

(h) differences and familiarisation training where the operator intends to assign a flight crew member to variant types;

(*i*) initial upgrade training for aircraft required to be crewed by two pilots;
(*j*) for aircraft with dual controls, pilot training to operate in either pilot seat for pilots required to operate in either seat;
(*k*) area, route and airport familiarisation training on initial conversion or upgrade training, as applicable;
(*l*) ACAS training (as applicable);
(*m*) RVSM training (as applicable);
(*n*) upset prevention and recovery;
(o) training for LVO;
(*p*) single-engine IFR and night VFR training, as applicable;
(*q*) single pilot IFR and night VFR training, as applicable;
(*r*) dangerous goods training if an operator is authorised to carry dangerous goods or, if not so authorised, dangerous goods awareness training; and
(*s*) any other course as may be required by the Director to ensure full competency of personnel on new or special equipment installed in an aircraft or other operations requiring specialized training.

(3) Training required by sub-regulation (1) shall be as prescribed in Document SA-CATS 93.

Division Three: Cabin crew member training

Cabin crew member training

93.03.3 A CAO, who is required to engage cabin crew in its operation, shall ensure that each cabin crew member has successfully completed an initial training as prescribed in this Part and Parts 64 and 121 of these regulations, before operating as a cabin crew member.

Division Four: Corporate employee and service agent training

Corporate employee and service agent training

93.03.4 (1) A CAO shall ensure provision of initial, recurrent and refresher training and checking as prescribed in Document SA-CATS 93 for any person whose function is essential to safe operations in terms of this Part.

(2) A person required to be provided with training in accordance with sub-regulation (1) shall include but not limited to —
(*a*) flight operations officer;
(*b*) ground service personnel, as applicable; and
(*c*) any other person that may be determined by the Director.

Division Five: Checking, Training and Validity

Checking of flight crew members and operational personnel

93.03.5 (1) A CAO may not assign a flight crew member to operate an aircraft under this Part unless has completed the check requirements as prescribed in Document SA-CATS 93.

(2) A flight crew member shall not accept an assignment to operate an aircraft under this Part unless he or she has completed the check requirements as prescribed in Document SA-CATS 93.

Certification training and validity periods

93.03.6 (1) Training, checking or demonstration of competency validity periods shall apply as follows:

(a) flight crew member:

(i) training shall be valid to a first day of a thirteenth month following a month in which such training took place;

(ii) a pilot proficiency check completed on an aircraft is valid to a first day of a seventh month following a month on which a pilot proficiency check took place; and

(iii) a pilot proficiency check completed on an approved FSTD is valid to a first day of a thirteenth month following a month on which such pilot proficiency check took place.".

(b) operational personnel—

(i) flight operations officers' training and checks shall be valid to a first day of a thirteenth month following a month on which a training or demonstration of competency took place; and

(ii) training and checks for all other personnel not included in paragraph (a) and sub-paragraph (b)(i) shall be valid to a first day of a twenty-fifth month following a month on which such training, check or demonstration of competency took place.

(2) A CAO shall, in an operations manual provide information and manner of intended compliance with pilot proficiency check requirements taking into account the risk of operation and type of aircraft operated.

(3) A CAO may deviate from the requirements prescribed in paragraph (a)(ii) and (iii) of sub-regulation (1), subject to such deviation being approved in an operations manual.

(4) Where any required training, check or demonstration of competency is renewed within the last 90 days of its validity period, its validity period shall be extended for 6, 12 or 24 months as appropriate.

(5) The Director may extend a validity period of any required training, check or demonstration of competency by up to 30 days where the Director is satisfied that an extension is justified and that aviation safety shall not be compromised: Provided that a request for such an extension is submitted prior to expiration of such training, check or demonstration of competency.

(6) Completion of any required training, check or demonstration of competency at any time during the periods specified in sub-regulations (4) or (5) shall be considered as completed in a month due for calculation of a next due date.

Pilot proficiency check

93.03.7 (1) A CAO shall ensure that each pilot acting as a flight crew member of an aircraft under VFR has, within the immediately preceding 12 months, successfully completed a flight crew proficiency check, administered by a holder of a valid type rated Grade II flight instructor rating as approved in an operations manual, which covers—;

(a) emergency procedures and a pilot's flying skills; and

(b) crew resource management, including human factors.

(2) A CAO shall ensure that each pilot acting as a flight crew member of an aircraft under IFR has within the immediately preceding 12 months, successfully completed a flight crew proficiency check administered by a DFE that covers—

(a) procedures, including emergency procedures, appropriate to the equipment fitted to the aircraft and to the type of operations to which the pilot is assigned; and

(b) crew resource management, including human factors.".

(3) A twelve monthly flight crew proficiency check, referred to in sub-regulation (2), may either be conducted on an aircraft or an approved FSTD and shall cover all aspects specified in Document SA-CATS 93: Provided that a pilot proficiency check shall be conducted in relation to each aircraft for which a pilot holds a valid rating and is required to operate.

(4) If an initial type rating on a turbojet or turbo fan aircraft is done on an aircraft, an approved simulator course must be completed within six months of a type rating.

(5) Where a flight simulator, as contemplated in sub-regulation (4) is not reasonably or timeously available, the Director may under exceptional circumstances exempt a CAO operating under this Part from this requirement for a particular type of aircraft for a period not exceeding twelve months: Provided that a CAO demonstrates a satisfactory equivalent of proficiency by other means.

SUBPART 4:
DOCUMENTATION AND RECORDS

Documentation requirements

93.04.1 (1) A CAO shall ensure that the following documents are carried on board an aircraft during flight—

(a) a copy of OFP;
(b) special load notification, if applicable;
(c) a certified copy of a suitable insurance certificate or proof of insurance;
(d) for CAOC holders, a certified copy of latest updated CAOC and OpSpec;
(e) load and trim sheet;
(f) a copy of standard operating procedures or aircraft operating manual, including aircraft performance data;
(g) a checklist as referred to in regulation 91.03.3;
(h) a copy of operations manual, where applicable; and
(i) a copy of dangerous goods report as specified in regulation 92.00.15, if applicable.

(2) A CAO shall ensure that a copy of OFP, a copy of relevant parts of flight folio, load trim sheet, crew list and where applicable, passenger list, cargo manifest and NOTOC, are retained in a safe place at a first point of departure in respect of each flight undertaken.

(3) Except when otherwise instructed by the Director, documents referred to in sub-regulation (2) shall be retained at the CAO's main base of operations for a period of at least 90 days.

Operations manual

93.04.2 (1) A CAO shall prepare an operations manual containing all the information required under this part and setting out the manner in which it will conduct its operation.

(2) A CAO shall ensure that an operations manual prepared in terms of sub-regulation (1) can be easily amended and —

(a) all parts thereof are consistent and compatible with any condition contained in its CAOC;
(b) contains an amendment control page and a list of effective pages that are in effect showing an effective date for each page; and
(c) has a date of last amendment to each page specified on that page that agrees with a list of effective pages.

(3) A CAO shall submit the operations manual in duplicate to the Director for approval.

(4) If the Director is satisfied that a CAO will comply with prescribed requirements, the Director shall certify in writing on both copies of an operations

manual that such manual has been approved and shall return one copy of an approved operations manual to an operator concerned.

(5) A CAO shall amend its operations manual—

(*a*) where there is a change in any aspect of an operation;

(*b*) where an operations manual no longer meets the requirements of these regulations or associated technical standards; or

(*c*) when so required by the Director.

(6) A CAO shall submit an amendment to its operations manual in duplicate to the Director for approval in accordance with sub-regulation (4).

(7) A CAO shall at all times operate its aircraft in accordance with an approved operations manual or an approved amendment thereto.

(8) A CAO shall ensure that—

(*a*) all operations personnel are able to understand a technical language used in an operations manual;

(*b*) all personnel are properly instructed in their particular duties and responsibilities and relationship of such duties to an operation as a whole;

(*c*) every flight is conducted in accordance with an operations manual and that those parts of an operations manual which are required for the conduct of a flight are easily accessible to crew members on board during flight time;

(*d*) an operations manual is available for the use and guidance of operations personnel;

(*e*) controlled copies of relevant sections of operations manual are made available on board an aircraft for use of crew members;

(*f*) each manual holder is provided with copies of all amendments after approval by the Director and such manual holder shall insert amendments issued to him or her prior to their next flight assignment; and

(*g*) an operations manual is kept in a safe place.

(9) A structure and contents of an operations manual referred to in sub-regulation (1) shall be as prescribed in Document SA-CATS 93.

Aircraft flight manual

93.04.3 (1) A CAO shall operate its aircraft in accordance with an approved AFM required by regulation 91.03.2.

(2) A CAO shall maintain a system that ensures timely receipt and insertion of all AFM revisions as published by an aircraft manufacturer or as required by the Director.

Operational flight plan

93.04.4 (1) A CAO shall ensure that an OFP is completed for each flight undertaken in terms of this Part.

(2) All entries in an OFP required to be completed for each flight shall be current and permanent in nature.

(3) An OFP shall contain all items as prescribed in Document SA-CATS 93.

(4) An OFP and its use shall be contained in the operations manual, where such operations manual is required.

Flight time and duty period records

93.04.5 (1) A CAO shall maintain current flight time and duty period records of all flight crew members in such operator's employ.

(2) A CAO shall retain flight time and duty period records referred to in sub-regulation (1) for a period of 15 calendar months calculated from a date of last flight of each flight crew member, on the ground at the main base of operation.

(3) A flight crew member, who is employed by more than one operator or otherwise accumulates flight time outside of his or her employment, shall maintain an accurate record of flight time and duty periods and shall provide copies thereof to all operators by whom such flight crew member is employed.

(4) Whilst a flight crew member is responsible to report all flight activity, each employer maintains responsibility to ensure a flight crew member concerned does not exceed prescribed flight time and duty scheme limits of an operator.

Training records

93.04.6 (1) A CAO shall establish a training file for each person required to receive training and retain on such file a record of all training and checking as specified in Document SA-CATS 93.

(2) A CAO shall establish procedures to make an employee's training file available for supervised review by such employee.

Load and trim sheet

93.04.7 (1) A PIC may not commence a flight until a person superintending a loading of such aircraft has completed and certified a load and trim sheet.

(2) A PIC may not conduct a take-off unless he or she has accepted a load and trim sheet as prescribed in Document SA- CATS 93.

(3) A load and trim sheet referred to in sub-regulation (1) shall be completed in duplicate and one copy shall be carried in an aircraft and one copy shall be retained in accordance with the provisions of regulation 93.04.1.

(4) A load and trim sheet shall contain minimum information as prescribed in Document SA-CATS 93.

SUBPART 5:
AIRCRAFT INSTRUMENTS AND EQUIPMENT

Flight, navigation and associated equipment for aircraft operated under IFR or at night

93.05.1 (1) An aircraft may only be operated under IFR or at night if such aircraft is equipped with flight, navigation and associated equipment as follows—

(*a*) for all large turbine-engine aeroplanes for which an individual certificate of airworthiness is first issued after 1 January 2014, or all aeroplanes for which an individual certificate of airworthiness is first issued after 1 January 2009, a pressure altitude reporting transponder with a capability of providing pressure-altitude information with a resolution of 25 ft or better for an aeroplane;

(*b*) for a helicopter and large aeroplane, a single standby attitude indicator, capable of being used from either pilot's station, which—

(i) is powered continuously during normal operation and, after a total failure of normal electrical generating system, is powered from a source independent of a normal electrical generating system;

(ii) provides reliable operation for a minimum of 30 minutes after total failure of normal electrical generating system, taking into account other loads on an emergency power supply and operational procedures;

(iii) operates independently of any other attitude indicating system;

(iv) is operative automatically after total failure of normal electrical generating system;

(v) is appropriately illuminated during all phases of operation: Provided that if a standby attitude instrument system is capable of being used through flight attitudes of 360° of pitch and roll, turn-and-slip indicators may be replaced by slip indicators.

(*c*) CNS equipment as prescribed in regulations 91.05.1 and 91.05.2.

(2) A CAO may not operate an aircraft in IMC, unless such aircraft is equipped with or comply with the following—

(*a*) at least two independent electrical generating systems, each operated by separate engine and individually capable of powering all required instruments and equipment necessary for safe emergency operation of an aircraft;

(*b*) at least two independent sources of energy, of which at least one is an engine-driven pump or generator, which are both able to drive all required gyroscopic instruments powered by or to be powered by that particular source, and installed in such a manner that failure of one instrument or source does not interfere with an energy supply to remaining instruments

or other energy source, except where a rate-of-turn indicator of a single-engine aircraft involved in all-cargo operations only, has a source of energy separate from a bank and pitch and direction indicators. For the purpose of this paragraph, each engine-driven source of energy of a multi-engine aircraft must be on a different engine;

(*c*) either airborne weather radar equipment or other equipment, approved by the Director, capable of detecting thunderstorms and other potentially hazardous weather conditions.

(3) In complying with the provisions of sub-regulation (1)(*b*) it shall be clearly evident to flight crew members when such standby attitude indicator is being operated by emergency power.

(4) Where a standby attitude indicator referred to in sub-regulation (1)(*b*) has its own dedicated power supply, there shall be an associated indicator, either on an instrument or instrument panel, when such power supply is in use.

(5) Instruments that are used by a pilot shall be so arranged as to permit a pilot to see their indications readily from his or her station with a minimum practicable deviation from a position and line of vision normally assumed when looking forward along a flight path.

Terrain awareness and warning system (GPWS/TAWS)

93.05.2 (1) All turbine-engine and piston-engine aircraft of a MTOM in excess of 5 700kg or authorised to carry more than nine passengers, shall be equipped with a TAWS which has a predictive terrain avoidance function.

(2) A TAWS referred to in sub-regulation (1) shall meet the requirements as prescribed in Document SA-CATS 91 and shall–

(*a*) automatically provide a timely and distinctive warning to flight crew when an aircraft is in potentially hazardous proximity to the earth's surface;

(*b*) provide, as a minimum, warning of at least the circumstances prescribed in Document SA-CATS 91.

(3) A person may not inhibit or otherwise render inoperative any required TAWS during flight time except in accordance with an approved aircraft flight manual.

Airborne weather radar equipment

93.05.3 (1) Subject to the provisions of sub-regulation (2), a PIC shall not operate an aeroplane, or helicopter with a maximum approved passenger seating configuration of more than nine seats, at night or in IMC in an area where thunderstorms or other potentially hazardous weather conditions, regarded as detectable with airborne weather radars, may be expected to exist along a route unless such aircraft is equipped with airborne weather radar equipment.

(2) In the case of a non-pressurised aeroplane, an airborne weather radar equipment required in terms of sub-regulation (1), may be substituted by other approved equipment, which is capable of detecting thunderstorms and other potentially

hazardous weather conditions, and capable of providing flight crew with bearing and distance of such detected conditions.

Airborne collision avoidance system

93.05.4 (1) A large turbine-engine aeroplane may only be operated if it is equipped with a serviceable ACAS II meeting specifications prescribed in Document SA-CATS 91.

(2) A flight crew member shall only operate a large turbine-engine if he or she is trained in the use of ACAS as prescribed Document SA-CATS 93.

Flight data recorder

93.05.5 (1) A CAO shall ensure that the following aircraft are equipped and operated with suitable FDR as specified in Document SA-CATS 93—

(*a*) aeroplane with an MCM exceeding 5 700 kg for which an original Certificate of Airworthiness was issued on or after 1 January 2005;

(*b*) aeroplane with an MCM exceeding 2 7000 kg for which an original Certificate of Airworthiness was issued on or after 1 January 1989;

(*c*) helicopter with an MCM exceeding 7 000 kg, or having a passenger seating configuration of more than nineteen, for which a certificate of airworthiness was first issued on or after 1 January 1989;

(*d*) helicopter with an MCM exceeding 3 180 kg for which a certificate of airworthiness was first issued after 1 January 2016; and

(*e*) turbine-engine helicopter with an MCM of 2 250 kg up to 3 180 kg, for which an application for type certification is submitted on or after 1 January 2018.

(2) A CAO shall ensure that an FDR required by sub-regulation (1) complies with the specifications prescribed in Document SA-CATS 91.

(3) Parameters of FDR shall be determined within ranges, accuracies and recording intervals as prescribed in Document SA-CATS 91.

Cockpit voice recorders

93.05.6 (1) A CAO shall ensure an aircraft operated under this part is equipped with a CVR specified in Document SA-CATS 91 if that aircraft—

(*a*) is an aeroplane that has a MTOW exceeding 5 700 kg but not exceeding 27 000 kg and to which a certificate of airworthiness was first issued on or after 1 January 1987 and is required to be operated by more than one pilot;

(*b*) is an aeroplane that has a MTOW exceeding 27 000 kg and to which a certificate of airworthiness was first issued on or after 1 January 1987; or

(*c*) is a helicopter that has a MTOW exceeding 7 000 kg.

(2) A CVR referred to in sub-regulation (1) may be combined with an FDR referred to in regulation 93.05.5.

(3) An aircraft equipped with a CVR may not be operated using magnetic tape or wire.

(4) An aircraft may commence a flight with a CVR inoperative: Provided that—

(*a*) an aircraft may not take-off from an aerodrome where repairs or replacements to such CVR can be made;

(*b*) an aircraft does not operate more than six consecutive flights with a CVR unserviceable;

(*c*) not more than 48 hours have elapsed since a CVR became unserviceable; and

(*d*) FDR required to be carried is operative, unless the FDR is combined with a CVR.

Equipment requirements for aeroplanes on long range over water flights

93.05.7 (1) In addition to equipment prescribed in regulations 91.04.24 and 91.04.25, the following equipment shall be installed in all aeroplanes when used over routes on which an aeroplane may be flown over water at more than a distance corresponding to 120 minutes at cruising speed or 400 nm, whichever is the lesser, away from land suitable for making an emergency landing in the case of aeroplanes operated in accordance with regulation 91.04.25 and 30 minutes or 100 nm, whichever is the lesser, for all single-engine landplanes—

(*a*) life-saving rafts in sufficient numbers to carry all persons on board, stowed so as to facilitate their ready use in an emergency, provided with such life-saving equipment, including means of sustaining life as is appropriate to a flight to be undertaken; and

(*b*) equipment for making distress signals.

(2) A life jacket and equivalent individual flotation device equipped with a means of electric illumination for the purpose of facilitating the location of persons shall be made accessible to every person on board an aeroplane engaged on long range over water flight.

(3) The life raft, survival radio equipment and information requirements for such extended over-water flight shall be as prescribed in Document SA-CATS 91.

Microphones

93.05.8 All flight crew members, when operating on flight deck duty, shall communicate through boom or throat microphones below the transition level or altitude.

Cabin attendant seats

93.05.9 (1) An aircraft shall, where applicable, be equipped with seats for cabin crew members, which are forward or rearward facing within 15° of the longitudinal axis of an aircraft and located as close as possible to floor-level emergency exits.

(2) A cabin crew member required to satisfy emergency evacuation criteria shall be provided a seat equipped with a safety harness: Provided that a safety belt with one diagonal shoulder strap is permitted if it not reasonably practical to fit a safety harness.

Supplemental oxygen and requirements

93.05.10 A person operating under this Part, shall comply with supplemental oxygen requirements prescribed in Part 91 of these regulations and Subpart 4 of Document SA-CATS 91.

SUBPART 6:
CORPORATE AVIATION OPERATOR CERTIFICATE

Requirements to hold a Corporate Aviation Operator Certificate

93.06.1 (1) A CAO may only operate an aircraft under conditions of a CAOC issued to that CAO in terms of this Part.

(2) A CAOC issued to a CAO in terms of this Part shall contain OpSpec, which shall include type, model or series and registration number of each aircraft approved for use by that particular CAO.

(3) A CAOC may be issued with any condition pertaining to an operation of an aircraft that is necessary for aviation safety and may contain Opspec regarding authorization with respect to low visibility operations, navigation system operations and conducting a specialized operation deemed necessary by the Director.

Validity and status of CAOC

93.06.2 (1) Subject to the provisions of sub-regulation (2), a CAOC shall be valid for indefinite period, unless otherwise provided by the Director.

(2) A CAOC shall cease to be valid if–

(a) voluntarily surrendered by a holder;
(b) cancelled by the Director; or
(c) a holder fails to pay an annual fee as prescribed in Part 187 of these regulations.

(3) The Director may suspend or cancel a CAOC if a holder–

(a) no longer meets requirement for the issuance of CAOC;
(b) fails to successfully complete prescribed audits and inspections;
(c) fails to resolve any adverse finding made by the Director within a reasonable period allowed by the Director; and
(d) violates a condition or OpSpec of a CAOC.

(4) Where a CAOC has seized to be valid or is suspended or cancelled by the Director, a holder must return a CAOC concerned to the Director within seven days of being so notified.

Application for issuance or amendment of CAOC and OpSpec

93.06.3 (1) An application for issuance or amendment of CAOC or OpSpec shall be made to the Director in the form and manner prescribed in Document SA-CATS 93 and shall be accompanied by appropriate fee as prescribed.

(2) An application referred to in sub-regulation (1) shall demonstrate that an applicant has adequate equipment, facilities and personnel to conduct a proposed operation in a safe and proper manner and in full compliance will applicable legislation.

(3) Where a CAO is not a registered owner of an aircraft to be used for operation under this Part, an application referred to in sub-regulation (1) shall be accompanied by a written agreement between a registered owner of an aircraft and a CAO in respect of the use of that aircraft.

(4) A holder of a CAOC may add to its OpSpec an aircraft registered on another AOC: Provided that—

(a) an aircraft is not registered on more than three operating certificates;

(b) an aircraft is maintained by only one AMO;

(c) a manual of procedures or maintenance control manual, as applicable, for all operators and OpSpec for each operator, specifying an AMO responsible for maintenance of each shared aircraft, by aircraft registration number;

(d) all operators use same aircraft flight folio such that there is one continuous record of aircraft's activities, and flight crew members are trained in the procedures for completion of flight folio;

(e) there is same procedure for entry, reporting and rectification of defect and flight crew members are trained in such procedure;

(f) where applicable, the flight crew members shall use a MEL approved for the aircraft and shall be trained in MEL procedures for that particular aircraft. The operations manual shall specify the procedures to be followed by the flight crew in the event the maintenance personnel is required; and

(g) each flight crew member's training file has records of ground and flight training covering any differences between model(s) operated by all operators concerned, including at least—

(i) safety equipment contained on board;

(ii) ancillary equipment such as navigational aids, auto flight system, flight director or FMS, ACAS, TAWS, weather radar; and

(iii) systems differences, engine or airframe limitations, performance considerations and operating characteristics.

(5) Personnel referred to in sub-regulation (2) shall be approved by the Director and shall include the following:

(a) accountable manager;
(b) person responsible for flight operations;
(c) person responsible for aircraft;
(d) safety manager; and
(e) quality manager."

(6) The Director may, after consideration of a scope and size of an operation concerned, approve assignment of more than one position to one person or approve different positions.

(7) The Director may only approve a nominated post-holder required by sub-regulation (5) if a nominee meets the qualifications and requirements prescribed in Document SA-CATS 93: Provided that the Director may accept a deviation from the qualification requirements on the basis of scope and size of an operation concerned.

(8) Notwithstanding any provision of the regulations, the Director may withdraw an approval if a post-holder no longer meets the requirements of such approval or fails to discharge responsibilities of that position.

(9) The Director may amend a CAOC if he or she is satisfied that it is in the public interest and the interest of aviation safety.

(10) An amendment referred to in sub-regulation (9) becomes effective on a date determined by the Director or, in the case of emergency requiring immediate amendment, immediately upon receipt of a written notice to that effect.

(11) Any person affected by an amendment referred to in sub-regulation (10) may make representation to the Director concerning such amendment: Provided that a CAO shall operate in accordance with such amendment until it is varied or set aside.

(12) A holder of CAOC may request amendment to CAOC or associated OpSpec at least 30 days prior to anticipated operation in accordance with such amendment.

(13) A person may not perform a corporate aviation operation for which a CAOC amendment is required until such amendment has been approved by the Director.

Application, adjudication of and issuance of CAOC and operations specifications

93.06.4 (1) In considering an application referred to in regulation 93.06.3, the Director may conduct an investigation as he or she deems necessary to determine an applicant's ability to meet the prescribed requirements.

(2) An application shall be granted and a CAOC and associated OpSpec issued, with such conditions as the Director may determine, if the Director is satisfied that an

applicant meets the prescribed requirements and will not operate contrary to any provision of the Act, the International Air Services Act or the Air Service Licensing Act.

(3) A CAOC and associated OpSpec shall be issued in a prescribed form and shall contain at least the information prescribed in Document SA-CATS 93.

Safety and security inspections and audits

93.06.5 An applicant for an issuance of a CAOC shall permit an authorised officer, inspector or authorised person to carry out such safety and security inspections and audits which may be necessary to support an application concerned.

Administrative duties of a CAOC holder

93.06.6 (1) A holder of a CAOC shall keep a certificate in a safe place and produce such certificate to an authorised officer or inspector, for inspection, if so requested.

(2) A CAO shall advise the Director of any changes in personnel occupying a management position, specified in regulation 93.06.3 (5) and shall submit names and qualifications of a replacement person to the Director for approval before effecting such change: Provided that, in a case of a sudden departure of an incumbent, a CAO shall immediately notify the Director of the event and means by which safety of operations will be ensured whilst embarking in a process of replacing such person.

(3) In case of change of its ownership, a CAO shall notify the Director of names and contact details of new owner.

Register of CAOCs

93.06.7 (1) The Director shall maintain a register of CAOCs issued in terms of these regulations.

(2) A register referred to in sub-regulation (1) shall contain at least the following particulars—

(*a*) full name and, if any, business name of a holder of CAOC;
(*b*) postal and physical addresses of a holder of CAOC;
(*c*) number of CAOC issued to such holder of CAOC;
(*d*) particulars of type of operation for which a CAOC was issued, including a list of OpSpec issued;
(*e*) particulars of category of aircraft for which a CAOC was issued; and
(*f*) date on which a CAOC was issued.

(2) Particulars referred to in sub-regulation (2) shall be recorded in a register within 30 days of issue of CAOC.

(3) A register shall be kept in a safe place at the premises of the Authority.

(4) A copy of a register shall be furnished to any person who requests such copy on payment of the appropriate fee as prescribed in Part 187 of these regulations.

Operator notification

93.06.8 (1) If a CAO operates, under its CAOC in a State, other than the Republic, the CAO shall notify the Director as well as the State in which the operation is conducted.

(2) On receipt of a notification referred to in sub-regulation (1), the Director shall coordinate safety and security oversight with an appropriate authority of a State in which an operation is performed.

Operational demonstration

93.06.9 (1) A person may only operate an aircraft under this Part, after that person has conducted satisfactory demonstration of operation as specified in Document SA-CATS 93.

(2) An aircraft may not be operated in a designated special area or through a use of a specialised navigation system unless a person operating an aircraft has conducted a satisfactory operational demonstration as required by the Director.

(3) The Director may authorise a deviation from this regulation if he or she finds that special circumstances require such a deviation in the interest of aviation safety and security.

SUBPART 7: FLIGHT OPERATIONS

Division One: General

Routes and areas of operation and aerodrome facilities for aeroplanes

93.07.1 (1) A single-engine aeroplane may be operated over any route or airway in IMC if a cloud base at any point along a route of flight is not lower than that which would permit descent in VMC below a minimum en-route altitude published or established by an operator for such route or airway.

(2) In an event of a failure of a critical engine, a twin-engine aeroplane may be operated over any route or airway in IMC if such aeroplane–

(*a*) is capable of maintaining a minimum en-route altitude published or established by an operator for such route or airway; or

(*b*) is able to maintain flight to a suitable landing area and a cloud base at any point along a route of flight is not lower than that which would permit descent in VMC below a minimum en-route altitude published or established by an operator for such route or airway and flight in VMC to a suitable landing area.

(3) In an event of a failure of any two engines, an aeroplane having three or more engines may be operated over any route or airway in IMC if such aeroplane is

capable of maintaining a minimum en-route altitude published or established by an operator for such route or airway.

(4) Notwithstanding the provisions of sub-regulations (1), (2) and (3), an aeroplane may be operated over any route or airway in IMC if such aeroplane is capable of landing at an intended destination or alternate aerodrome in accordance with a related landing performance criteria for such aeroplane.

(5) A PIC shall comply with the relevant provisions of Document SA-CATS 93 when planning destination alternate aerodromes.

(6) A CAO shall operate all flights in accordance with such route, aerodrome or other approvals and conditions pertaining to flight operations as are contained in its CAOC.

(7) A CAO shall specify in its operations manual procedures used to determine minimum altitudes to be flown in order to meet obstacle clearance requirements specified in regulation 91.07.2 and, for operations in uncontrolled airspace, the means for ensuring that a navigational capability is maintained while operating on any route used therein.

(8) subject to the provisions of sub-regulation (9), a person may not commence a flight unless such person has ascertained, by every reasonable means available, that aerodrome ground facilities and services, including meteorological and rescue fire-fighting services are—

(*a*) available as required for a safe operation of an aircraft and protection of passengers;

(*b*) adequate for a type of operation being conducted; and

(*c*) functioning normally for their intended purpose.

(9) A CAO, who is unable to comply with the provisions of sub-regulation (8), shall establish procedures in its operations manual that will ensure an operation will be safely conducted, and such procedures shall, in an event that rescue fire-fighting services at an aerodrome that may be used are or may be below that for which an aerodrome is certified, include risk assessment as prescribed in Part 140.

(10) A CAO shall report without delay to a responsible authority any observed operational inadequacy of facilities referred to in sub-regulation (8).

Routes and areas of operation and aerodrome facilities for helicopters

93.07.2 (1) Subject to the provisions of subsection (2), a person operating a helicopter in terms of this Part shall ensure that such operation is only conducted along such routes for which—

(*a*) it has been ascertained by every reasonable means available that ground facilities and services, including meteorological services, are available as required for a safe operation of a helicopter and protection of passengers, are adequate for a type of operation being conducted and are functioning normally for their intended purpose; and

(*b*) appropriate maps and charts are available.

(2) A CAO who is unable to comply with the provisions of sub-regulation (1) shall establish procedures in its operations manual that will ensure an operation will be safely conducted, and such procedures shall, in an event that rescue fire-fighting services at an aerodrome that may be used are or may be below that for which an aerodrome is certified, include risk assessment as prescribed in Part 140.

(3) A CAO shall ensure that—

(*a*) flights are only conducted within such areas and along such routes and in accordance with such conditions for which approval or authorisation has been obtained from appropriate authority as required;

(*b*) performance of a helicopter intended to be used, is adequate to comply with minimum flight altitude requirements; and

(*c*) equipment of a helicopter intended to be used, complies with minimum requirements for a planned operation.

(4) A CAO shall report without delay to a responsible authority any observed operational inadequacy of facilities referred to in sub-regulation (1).

(5) Prior to conducting a passenger-carrying IFR or night VFR flight in uncontrolled airspace, an operator shall ensure that a navigational capability is able to be maintained while operating on any route used in such airspace.

(6) For offshore operations as referred to in regulation 93.07.25, an operator shall select suitable offshore alternates and specify each in the OFP for each IFR flight as provided in Document SA-CATS 93.

(7) A CAO may only permit a commencement of a flight to be conducted in accordance with IFR for which one or more destination alternate aerodromes are required, only if aerodrome meteorological forecast indicates that conditions for a period of at least one hour before until one hour after estimated time of arrival at both destination and alternate aerodrome will meet or exceed those prescribed in Document SA-CATS 93.

(8) A PIC may not commence a flight to be conducted in accordance with IFR for which one or more destination alternate aerodromes are required, unless if aerodrome meteorological forecast indicates that conditions for a period of at least one hour before until one hour after estimated time of arrival at both destination and alternate aerodrome will meet or exceed those prescribed in Document SA-CATS 93.

Establishment of procedures

93.07.3 (1) A CAO shall provide a checklist system to be used by flight crew members for all phases of operation under normal, abnormal and emergency conditions, to ensure that operating procedures are followed.

(2) An approved checklist system referred to in sub-regulation (1), shall include—

(*a*) an easy-to-use checklist for normal phases of flight operation;

(*b*) a quick reference-type checklist dealing with malfunctions requiring a use of abnormal or emergency procedures;

(c) an amplified checklist that ensures all reference check items are dealt with in accordance with an aircraft manufacturer's recommended procedures, if any;
(d) an easy to locate and employ system of supplementary checks and procedures, if applicable;
(e) any other check items relating to the use of equipment not installed at the time of aircraft manufacture or not included in a check system provided for in an aircraft flight manual and;
(f) human factor principles in design and utilization.

(3) A PIC shall ensure all check procedures, including checklists, are complied with in detail.

Competence of operations personnel

93.07.4 A CAO shall ensure that all personnel assigned to, or directly involved in ground and flight operations, are properly instructed, have demonstrated their abilities in their particular duties and are aware of their responsibilities and the relationship of such duties to the operation as a whole.

Use of air traffic services

93.07.5 A PIC shall ensure that air traffic services are used for all flights whenever available.

Instrument approach and departure procedures

93.07.6 A CAO may implement instrument approach and departure procedures, other than instrument approach and departure procedures referred to in regulation 91.07.16: Provided that such instrument approach and departure procedures have been approved by the Director or an appropriate authority of a State in which a concerned aerodrome is located.

IFR or night flight without second-in-command

93.07.7 (1) Subject to the provisions of sub-regulation (2), a CAO may not operate an aircraft during IFR or night VFR flight without a second-in-command.

(2) A flight conducted under the following circumstances is exempted from a prohibition in sub-regulation (1):
(a) flight conducted with an aeroplane with a MCTOW of less than or equal to 5 700 kg;
(b) flight conducted with a helicopter with a MCTOW of equal or less than 3 180 kg;
(c) flight conducted with an aircraft with certificated to carry a maximum of nine passengers;
(d) flight conducted with an aircraft not certificated or otherwise required by these regulations to be flown by two pilots; and

(e) flight conducted by an operator who is authorised to do so in his or her OpSpec and in accordance with the relevant provisions of Document SA-CATS 93.

Reporting of hazardous flight conditions

93.07.8 A PIC shall report any condition considered to be hazardous to his, her or another aircraft to any appropriate ATSU as soon as possible, giving such details as may be pertinent to safety of aircraft.

Refueling and de-fueling with passengers on board

93.07.9 (1) An aircraft may not be refueled or defueled when passengers are embarking, disembarking or on board, unless such fueling or defueling is carried out in accordance with procedures specified in Document SA-CATS 93 and an AFM makes provision for such procedures.

(2) Procedures referred to in sub-regulation (1) shall be included in an operator's operations manual.

Reporting acts of unlawful interference

93.07.10 A PIC shall report an act of unlawful interference, which, in his or her opinion, may jeopardize safety of persons on board an aircraft, to a nearest ATSU through a most discrete method possible using means devised for such communication.

In-flight simulation of emergencies

93.07.11 A person may not simulate any emergency or abnormal condition during flight that would effectively alter a flight characteristic of an aircraft or otherwise induce a potentially unsafe condition when passengers are on board such aircraft.

Security of the flight crew compartment

93.07.12 (1) A PIC shall ensure that a flight crew compartment door, where fitted, is closed and locked in all phases of a flight if, in his opinion, it is in the interest of aviation security.

(2) If cabin crew is required or carried, a CAO shall establish procedures by which cabin crew can discreetly notify flight crew in the event of suspicious activity or security breaches in a cabin.

Environmental protection

93.07.13 A CAO engaged in international operation shall comply with the requirements relating to the monitoring, reporting and verification of annual CO_2 emissions as prescribed in Part 91 of these regulations.

Division Two: Dispatch and flight release rules

Operational control and supervision of flight operations

93.07.14 (1) A CAO shall establish and maintain an OCS that meets the requirements prescribed in Document SA-CATS 93 and which provides operational control services appropriate to flights operated.

(2) A CAO may use an OCS of an agent whether domestic or foreign: Provided that a service agreement is approved by the Director and methods, procedures and policies for effecting operational control are described in the CAO's operations manual.

Retention of flight operations documents and reports

93.07.15 (1) Unless otherwise specified by the Director, a CAO shall retain all flight documents made in terms of this subpart, for a period of not less than 90 days.

(2) All flight documentation required by this subpart to be prepared with respect to a flight and which was carried on board that flight shall be returned to a main base specified in a CAOC.

(3) Flight documentation referred to in sub-regulation (2) shall include weather maps and printed information, NOTAMs, cargo and fuel loading sheets and manifests and all paperwork used to record a flight's progress or diversion and irregular or emergency situations.

Minimum equipment list

93.07.16 (1) A person may not conduct a take-off in an aircraft with instruments or equipment that are not serviceable or that have been removed unless an aircraft is operated in accordance with a CDL, provisions specified in such aircraft flight manual or conditions or limitations specified in a MEL, which have been approved by the Director.

(2) A CAO shall establish a MEL for each type of aircraft for which a MMEL has been approved by a State of Manufacture of such aircraft: Provided that such State of Manufacture is a Contracting State.

(3) An aircraft may only be operated in accordance with a MEL if such MEL is carried on board.

Aerodrome operating *minima*

93.07.17 (1) A CAO shall establish aerodrome operating *minima* for each aerodrome planned to be used in a manner approved by the Director.

(2) Aa aerodrome operating *minima* referred to in sub-regulation (1) shall not be lower than the values prescribed in Document SA-CATS 91, except as provided in regulation 91.06.32.

(3) A CAO shall ensure that all instrument approaches and departures are conducted in accordance with procedures approved for such operator in its OpSpec.

(4) Where a CAO is operating at an aerodrome other than a South African aerodrome, an aerodrome operating *minima* established by such operator may be lower than a *minima* established by an appropriate authority of a State in which such aerodrome is located: Provided that—

(*a*) a State concerned approves a lower operating *minima;* and

(*b*) a CAO has been authorised in its OpSpec to operate to such lower *minima.*

Fuel and oil supply and record keeping

93.07.18 (1) A CAO shall establish a policy and procedures to ensure that in-flight fuel checks and fuel management are performed.

(2) A policy and procedures referred to in sub-regulation (1) shall be submitted to the Director for approval.

(3) A PIC shall be responsible to ensure that in-flight fuel checks and fuel management are performed.

Operation of aircraft in icing conditions

93.07.19 (1) A person may not conduct a take-off or continue a flight in an aircraft when icing conditions are reported to exist or are forecast to be encountered along a route to be flown unless an aircraft is equipped to be operated in such conditions and a type certificate or an AFM authorises flying in such conditions.

(2) A flight may not be initiated or continued on in icing conditions where, in the opinion of a PIC, the conditions experienced may adversely affect flight safety.

(3) An aircraft may not be operated in icing conditions at night unless such aircraft is equipped with means to illuminate a representative surface or otherwise detect a formation of ice.

Mass and balance control

93.07.20 (1) A person may not operate an aircraft unless, during every phase of that flight, load restrictions, mass and centre of gravity of an aircraft conform to limitations specified in an aircraft flight manual.

(2) A CAO shall have a mass and balance programme that complies with regulation 91.07.11.

(3) A CAO shall specify in its operations manual its mass and balance programme and instructions to employees regarding a preparation and accuracy of mass and balance forms and load and trim sheet.

Inertial navigation and inertial reference systems

93.07.21 A person may only use inertial navigation or reference systems if so authorised by the Director and in accordance with requirements prescribed in Document SA-CATS 93.

Low visibility operations

93.07.22 A person may not conduct a low visibility take-off or Category II or III approach unless—

(*a*) such a person is authorised to do so by the Director;

(*b*) such person meets the conditions prescribed in Document SA-CATS 93; and

(*c*) such take-off or approach is conducted in accordance with procedures approved for a CAO in its operations manual and specified on OpSPec.

Operations with head-up displays, enhanced vision systems and night vision goggles

93.07.23 (1) A CAO may not use an automatic landing system, a HUD or equivalent display, EVS, NVG, SVS or CVS or any combination of these systems into a hybrid system for safe operation of an aircraft, while operating in accordance with an IFR unless he or she meets the requirements specified in Document SA-CATS 93 and is approved to do so by the Director.

(2) A CAO shall include procedures for use of equipment referred in sub-regulation (1) in its operations manual.

Operations with electronic flight bags

93.07.24 (1) A CAO may only use an EFB in compliance with the EFB requirements prescribed in Document SA-CATS 93 and only when authorised to do so by the Director.

(2) A CAO, who intends to use EFB, shall include procedures for use of such equipment in its operations manual.

Helicopter offshore operations

93.07.25 (1) A CAO shall ensure that, in case of a flight over water by a helicopter—

(*a*) a helicopter is equipped for flights over water in terms of these Regulations;

(*b*) a shore base or other flight-monitoring station shall maintain means of flight monitoring with a helicopter as approved by the Director; and

(*c*) a full complement of crew to operate a helicopter and its safety equipment under normal, abnormal or emergency conditions is carried on board.

(2) A PIC shall ensure that if a flight is undertaken in accordance with provisions of sub-regulation (1) with a single-reciprocating-engine helicopter—

(a) such flight shall only be undertaken by daylight and under VMC;
(b) a flight may not be commenced if it cannot be completed at least one hour before night;
(c) flight shall be limited to five nautical miles seaward from base unless if a flight is undertaken by an amphibian helicopter or a helicopter with approved flotation gear.

(3) A PIC shall ensure that if a flight is undertaken in accordance with the provisions of sub-regulation (1) with a single-turbine-engine helicopter—
(a) a flights shall be undertaken only by daylight and under VMC;
(b) flight shall be limited to 50 nautical miles seaward from base unless if a flight is undertaken by an amphibian helicopter or a helicopter with approved flotation gear; and
(c) for a flight from 5 nautical miles over water, sufficient survival dinghies are carried in such a manner that they will be instantly accessible at a time of ditching.

(4) A CAO shall ensure that if a flight is to be undertaken by night or under IMC using a multi-engine helicopter, such helicopter is equipped for IFR operations and functioning area or on-board navigation aids are available.

(5) A CAO may not, when planning flight for over-water operation, consider off-shore alternates when it is possible to carry enough fuel to plan for an on-shore alternate landing site: Provided that an off-shore alternate landing site may be considered in exceptional circumstances, other than for landing for purposes of payload enhancement in adverse weather conditions.

(6) For the purposes of this Part, "shore base" means a site from which a flight over water is commenced or supported.

Division Three: Cabin safety

Carry-on baggage

93.07.26 (1) A CAO shall establish adequate procedures to ensure that only baggage that can be adequately and securely stowed is carried onto an aircraft and taken into a passenger cabin.

(2) Minimum requirements for procedures referred to in sub-regulation (1) are prescribed in Document SA-CATS 93.

(3) A PIC shall be responsible to ensure that only baggage that can be adequately and securely stowed is carried onto an aircraft and taken into a passenger cabin.

Securing of passenger cabin and galley

93.07.27 (1) Before take-off and landing and whenever deemed necessary in the interests of aviation safety, a PIC shall ensure that—
(a) all equipment, baggage and loose articles in a cabin of an aircraft, including passenger service items and crew members' and passengers' personal effects, are properly secured and stowed so as to avoid a

possibility of injury to persons or damage to such aircraft through movement of such articles caused by in-flight turbulence or by unusual accelerations or maneuvers; and

(*b*) all aisles, passage ways, exits and escape paths are kept clear of obstructions.

(2) All solid articles shall be placed in approved stowage areas in an aircraft, at all times whenever seat belt lights are illuminated or when so directed by a PIC of an aircraft.

(3) For the purposes of sub-regulation (2), approved stowage area means an area under a passenger seat or a locker, overhead or other, utilised in accordance with placarded mass limitation of a locker.

(4) Where service galleys are made available to passengers on a self-service basis, a cabin briefing shall include a demonstration and safety instructions in the use and stowage procedures of galley area containing such services.

(5) A PIC may not commence take-off unless he or she has completed such cabin checks as necessary to ensure safe condition of a cabin.

Briefing of passengers

93.07.28 (1) A PIC shall ensure that passengers are given a safety briefing in accordance with Document SA-CATS 93 before commencement of a flight.

(2) Where a safety briefing referred to in sub-regulation (1) is insufficient for a passenger because of that passenger's physical, sensory or comprehension limitations or because that passenger is responsible for another person on board an aircraft, a PIC shall ensure that such passenger is given an individual safety briefing that is appropriate to his or her needs.

(3) A PIC shall ensure that, in an event of an emergency and where time and circumstances permit, all passengers are given an emergency briefing in accordance with the requirements prescribed in Document SA-CATS 93.

(4) A PIC shall ensure that each passenger who is seated next to an emergency exit is made aware of how and is willing to operate that exit.

Safety features card

93.07.29 A CAO shall ensure that each passenger seat is equipped with a card containing safety features in pictographic form and wording in the English language.

Carriage of infants

93.07.30 (1) A CAO shall ensure that an infant is only carried in an aircraft when properly secured in the arms or on a lap of an adult passenger, or with a child restraint device or in a sky cot.

(2) A sky cot referred to in sub-regulations (1) shall be fitted with a restraining device so as to ensure that an infant will not be thrown from such sky cot under a maximum acceleration to be expected in flight.

(3) A passenger may not be responsible for a safety of more than one infant on board an aircraft.

(4) An infant may not be carried behind a bulkhead unless a child restraint device is used during a critical phase of a flight and during turbulence.

(5) A sky cot shall be positioned in such a way that it does not prevent or hinder a movement of adjacent passengers or block exits and may not be used during a critical phase of a flight.

(6) When an infant is carried in the arms or on a lap of a passenger—

(a) a seat belt, when required to be worn, shall be fastened around a passenger carrying or nursing an infant, but not around an infant; and

(b) a name of such infant shall be bracketed on a passenger list with a name of a person carrying or nursing that infant.

(7) An infant may be seated in a car-type infant seat which is approved for use in an aircraft, provided—

(*a*) an infant's seat is secured to an aircraft seat in accordance with instructions provided with that child seat;

(*b*) an infant's seat is designed to be secured to a passenger seat by means of a single lap strap and face the same direction as a passenger seat;

(*c*) a lower part of a shell does not unreasonably extend beyond a forward position of a passenger seat cushion on which it rests;

(*d*) an infant's seat is secured to a passenger seat at all times during flight, even when it is unoccupied by a child;

(*e*) only an infant shall be removed from an aircraft in an emergency evacuation, not the infant's seat;

(*f*) an infant's seat is positioned in such a way that it does not prevent or hinder movement of adjacent passengers or block exits;

(*g*) an infant's seat is not placed in an aisle seat, depending on cabin configuration;

(*h*) an infant's seat is used in accordance with infant weight limitations specified for such device;

(*i*) an infant's seat is fitted with a single release harness, which secures an infant's lap torso and shoulders, but designed that a child can easily be secured in or removed from it; and

(j) an infant seat is not located at a same row or row directly forward or aft of an emergency exit unless if such exit and row are separated by a bulkhead.

Carriage of persons with disability

93.07.31 (1) All flight crew members shall be responsible for identification, seating position and handling of a passenger with disability.

(2) A CAO shall ensure that—

(*a*) a PIC is notified when a passenger with a disability is to be carried on board;

(*b*) a passenger with a disability is not seated in a same row or a row directly forward or aft of an emergency exit;

(*c*) individual briefing on emergency procedures is given to a passenger with a disability and his or her able-bodied assistant, appropriate to the needs of such passenger; and

(*d*) a person giving a briefing on emergency procedures shall enquire as to the most appropriate manner of assisting a passenger with a disability so as to prevent pain or injury to such passenger.

(3) Subject to the provisions of sub-regulation (4), a person with disability may be carried on a stretcher in an aircraft only if—

(*a*) a stretcher is secured so as to prevent it from moving under a maximum acceleration likely to be experienced in flight and in an emergency alighting such as ditching;

(*b*) such a person is secured by an approved harness to a stretcher or aircraft structure; and

(*c*) is accompanied by an able-bodied assistant.

(4) A person not licensed in terms of Part 138 of these regulations may carry a patient on a stretcher only in case of an emergency as provided for in regulation 91.07.19 (4).

(5) Subject to the provisions of sub-regulation (6), a person with a certified mental disability may only be carried in an aircraft if—

(*a*) he or she is accompanied by an able-bodied assistant; and

(*b*) a medical certificate has been issued by a medical practitioner certifying that such a person with mental disability is suitable for carriage by air and that there is no risk of violence from such person.

(6) A CAO shall obtain a special permission from the Director before carriage of a person with a mental disability who, according to his or her medical history, may become violent.

(7) A passenger with a splinted or artificial limb may travel unaccompanied provided he or she is able to assist himself or herself.

(8) An affected limb or supporting aids of a passenger referred to in sub-regulation (7), may not obstruct an aisle or any emergency exit or equipment.

SUBPART 8:
AIRCRAFT PERFORMANCE OPERATING LIMITATIONS

General requirements

93.08.1 (1) Any determination made for the purposes of this Subpart shall be based on approved performance data set out in an aircraft flight manual for an aircraft concerned.

(2) A person may deviate from the requirements of this Division if that person—

(*a*) is authorised to do so in his or her OpSpec; and

(*b*) complies with the requirements as prescribed in Document SA-CATS 93.

(3) Where a person uses charts or graphs published in an approved aircraft flight manual, allowance shall be made to ensure any extract errors will be on a side of safety.

(4) A CAO shall adopt obstacle data sufficient to make accurate and safe performance calculations.

(5) A CAO shall ensure helicopter operations are conducted in a manner that gives appropriate consideration for achieving a safe forced landing in an event a safe continuation of flight is not assured following a critical power-unit failure.

(6) An aircraft shall be operated in compliance with the terms of its certificate of airworthiness and within approved operating limitations contained in its flight manual.

(7) A flight may not be commenced with unless performance information provided in an aircraft flight manual, supplemented with data, indicates that the requirements prescribed in this Subpart shall be complied with for a flight to be undertaken.

(8) A PIC shall, before commencement of a flight, ensure that the following factors, as applicable to a phase of a flight, are taken into account—

(*a*) mass of an aircraft;

(*b*) operating procedures employed by an operator;

(*c*) pressure-altitude appropriate to an elevation of an aerodrome;

(*d*) ambient temperature;

(*e*) wind;

(*f*) runway slope (aeroplane only);

(*g*) condition of a surface; and

(*h*) any other factor that can significantly affect a performance of an aircraft.

(9) The factors specified in sub-regulation (8) shall be taken into account either directly as operational parameters or indirectly by means of allowances or margins, which may be provided in a scheduling of performance data or in a comprehensive and detailed code of performance in accordance with which an aircraft is being operated.

Division One: Aeroplane limitations

Take-off mass limitations

93.08.2 (1) A person may not conduct a take-off in an aircraft if a mass of an aircraft—

(*a*) exceeds the MTOM specified in an aircraft flight manual for a pressure altitude and an ambient temperature at an aerodrome where such a take-off is to be made; or

(*b*) after allowing for planned fuel consumption during a flight to a destination aerodrome or alternate aerodrome, exceeds a landing mass specified in an aircraft flight manual for a pressure altitude and an ambient temperature at a destination aerodrome or alternate aerodrome.

(2) For the purposes of determination of MTOM referred to in sub-regulation (1)—

(*a*) a required accelerate-stop distance shall not exceed an accelerate-stop distance available;

(*b*) a required take-off run shall not exceed a take-off run available; and

(*c*) a required take-off distance shall not exceed a take-off distance available.

(3) The following factors shall be taken into account for the purposes of sub-regulation (2)—

(*a*) mass of an aircraft;

(*b*) specific operating procedures;

(*c*) pressure altitude at an aerodrome;

(*d*) ambient temperature;

(*e*) runway slope in a direction of take-off;

(*f*) reported headwind component, which shall not more than 50 percent;

(*g*) reported tailwind component, which shall not be less than 150 percent;

(*h*) loss of effective take-off run available during runway alignment except where rolling take-off is approved;

(*i*) where a runway condition is other than bare and dry, appropriate penalty based upon a runway condition or contaminates such as slope, ice, snow, slush, standing water or water surfaces for seaplanes, shall be factored into a performance calculation; and

(j) any other factor that may significantly affect an aircraft performance.

Net take-off flight path

93.08.3 (1) A person may not conduct a take-off in an aircraft if a mass of such aircraft is greater than a mass specified in such aircraft flight manual as allowing a net take-off flight path that clears all obstacles by at least 35 feet vertically or at least 62 meters horizontally within an aerodrome boundaries and by at least 95 meters horizontally outside such boundaries.

(2) In determining a maximum mass, minimum distances and flight path referred to in sub-regulation (1)—

(*a*) corrections shall be made for—

(i) runway to be used;

(ii) runway slope in a direction of take-off;

(iii) pressure-altitude at an aerodrome;

(iv) ambient temperature; and

(v) wind component at a time of take-off, where not more than 50 percent of reported headwind component or not less than 150 percent of reported tailwind component may be considered; and

(*b*) calculations shall be based on a pilot—

(i) not banking an aircraft before reaching an altitude of 50 feet;

(ii) subject to sub-regulation (3), using 15 degrees or less of bank at or below 400 feet; and

(iii) using not more than 25 degrees of bank thereafter, aircraft speed and configuration permitting.

(3) A bank angle greater than the 15 degrees referred to in sub-regulation (2)(*b*)(ii) may only be used if authorised by the Director.

(4) A CAO shall issue operating instructions and provide information on aeroplane climb performance with all engines operating to enable a PIC to determine a climb gradient that can be achieved during a departure phase for an existing take-off condition and intended take-off technique.

(5) Information referred to in sub-regulation (4) shall be included in an operations manual.

Dispatch limitations: landing at destination and alternate aerodromes

93.08.4 (1) A person may not dispatch or conduct a take-off in an aircraft unless—

(*a*) if obstacles in an approach path has been cleared in both an aerodrome of intended landing and alternate aerodrome;

(*b*) such aircraft is able to land on a runway with an assurance that it shall come to a stop; or

(*c*) for a seaplane, with a satisfactorily low speed within a landing distance available as per such aircraft flight manual.

(2) Where an aerodrome of intended landing has noise criteria that may require a landing mass reduction, a take-off mass shall be adjusted to comply with such limitations.

Dispatch limitations: wet runway - turbojet- or turbofan-powered aircraft

93.08.5 (1) Where a runway is wet and contaminated, a turbojet or turbofan-powered aircraft shall be operated in accordance with restrictions contained in such aircraft flight manual and operator's operations manual and standard OpSpec.

Division Two: Helicopter limitations

Helicopter limitations

93.08.6 A person operating a helicopter under this Part shall comply with helicopter limitations contained in Subpart 8 of Part 127 of these regulations.

SUBPART 9: MAINTENANCE CONTROL

General

93.09.1 (1) A CAO may not operate an aircraft under this Part unless such aircraft is maintained in accordance with Parts 21 and 43 of these regulations.

(2) A CAO shall ensure that an aircraft is maintained in accordance with an approved aircraft maintenance programme.

(3) A maintenance programme referred to in sub-regulation (2) shall be provided to maintenance personnel and such other personnel as may be required.

Aircraft maintenance program

93.09.2 (1) A maintenance programme referred to in regulation 93.09.1 (2) shall be developed for each aircraft and shall contain the following information—

(*a*) maintenance tasks and intervals at which these tasks are to be performed, taking into account an anticipated utilisation of an aircraft;
(*b*) where applicable, a continuing structural integrity program;
(*c*) procedures for changing or deviating from paragraphs (*a*) and (*b*); and
(*d*) where applicable, condition monitoring and reliability program descriptions for aircraft systems, components and power-plants.

(2) Maintenance tasks and intervals that have been specified as mandatory in approval of a type design shall be identified as such.

(3) A design and implementation of a maintenance program shall observe human factors principles.

(4) Upon approval of the Director, copies of all amendments to a maintenance programme shall be furnished promptly to all organisations or persons to whom a maintenance programme has been issued.

Maintenance contracted to approved AMO

93.09.3 A CAO may only contract out its maintenance to a holder of an AMO approval with appropriate rating issued in terms of Part 145 of these regulations.

Operator's maintenance responsibilities

93.09.4 (1) A CAO shall establish procedures acceptable to the Director that ensure—

(*a*) each aircraft operated is maintained in an airworthy condition;
(*b*) operational and emergency equipment necessary for an intended flight are serviceable; and
(*c*) maintenance of validity of a certificate of airworthiness of each aircraft operated.

(2) A CAO may not operate an aircraft unless it is maintained and released to service by an organisation approved in terms of Part 145 of these regulations.

(3) A CAO shall be resourced sufficiently to ensure that all maintenance is carried out in accordance with a maintenance control manual referred to in regulation 93.09.5.

(4) A CAO shall ensure that maintenance of its aircraft is performed in accordance with approved maintenance program.

Operator's maintenance control manual

93.09.5 (1) A CAO shall provide a maintenance control manual that meets the requirements prescribed in Document SA-CATS 43 for the use and guidance of maintenance and operational personnel concerned.

(2) A maintenance control manual referred to in sub-regulation (1) shall incorporate relevant principles of human factors.

(3) If a CAO develops a separate maintenance control manual as part of an operations manual system, two copies of a proposed maintenance control manual shall be provided to the Director for approval.

(4) A CAO shall amend its maintenance control manual as necessary in accordance with amendment procedures contained in a maintenance control manual, in order to keep information contained therein up-to-date and accurately reflect a CAO policy with respect to maintenance of its aircraft.

(5) A CAO shall forward two copies of amendments to a maintenance control manual to the Director for approval.

(6) Upon receipt of approved amendment, each holder of a maintenance control manual shall be furnished a copy of such amendment with clear instructions to insert amended pages in a timely manner into a maintenance control manual.

(7) The Director may require a CAO to amend a maintenance control manual where he or she is of the opinion that such maintenance control manual requires updating.

Maintenance records

93.09.6 (1) The following records shall be kept for each aircraft for periods prescribed in sub-regulation (3)—

(*a*) total time in service (hours, calendar time and cycles, as appropriate) of an aircraft and all its life limited components;
(*b*) current status of compliance with all mandatory continuing airworthiness information;
(*c*) appropriate details of modifications and repairs;
(*d*) time in service (hours, calendar time and cycles, as appropriate) since last overhaul of an aircraft or its components subject to a mandatory overhaul life;
(*e*) status of an aircraft's compliance with its maintenance program; and
(*f*) detailed maintenance records to show that all requirements for signing of a maintenance release have been met.

(2) A CAO shall describe in its maintenance control manual a person who is responsible for retention of records required by sub-regulation (1) and where they will be kept.

(3) Records referred to in sub-regulation (1) (*a*) to (*e*) shall be kept for a minimum period of 6 months after a unit to which they refer has been permanently withdrawn

from service and records referred to in sub-regulation (1) (*f*) for a minimum period of 5 years after signing of a maintenance release.

(4) Records referred to in sub-regulation (1) shall be made available to the new operator in the event of a temporary change of operator or transferred to a new operator in the event of a permanent change of operator.

Continuing airworthiness information

93.09.7 (1) An owner or operator of an aeroplane, of MTOM in excess of 5 700 kg or any helicopter, shall monitor and assess maintenance and operational experience with respect to continuing airworthiness and provide such information as required by the Director using a reporting designed for that purpose by the Director.

(2) The Director shall transmit all mandatory continuing airworthiness information reported to him or her in accordance with sub-regulation (1) to a State of Design of an aircraft that has been issued a South African certificate of airworthiness and operated in terms of this Part.

(3) A person referred to in sub-regulation (1) shall obtain and assess continuing airworthiness information and recommendations issued by an aircraft manufacturer, an organisation responsible for an aircraft type design or by a State of Design, or any additional requirements issued by the Director for each type of aircraft operated under this Part and shall implement resulting actions considered necessary in accordance with a procedure acceptable to the Director.

Modifications and repairs

93.09.8 (1) All modifications and repairs done on an aircraft shall comply with airworthiness requirements acceptable to the Director.

(2) A CAO shall establish procedures to ensure that substantiating data supporting compliance with airworthiness requirements are retained.

SUBPART 10:
QUALITY SYSTEMS

Requirements for QMS

93.10.1 (1) A CAO shall establish a QMS that meets requirements prescribed in Document SA-CATS 93.

(2) A QMS referred to in sub-regulation (1) shall—

(*a*) include a quality assurance program that contains procedures designed to verify that all operations are being conducted in accordance with all applicable requirements, standards and procedures; and

(*b*) be described in relevant documentation as prescribed in Document SA-CATS 93.

(3) A CAO shall designate a person responsible for the QMS who meets qualifications and experience requirements and who will be responsible for the functions as prescribed in Document SA-CATS 93.

(4) A CAO shall prepare a quality management manual that meets the requirements prescribed in Document SA-CATS 93.

(5) Notwithstanding sub-regulation (3) above, an operator may appoint two quality managers, one for flight operations and one for maintenance: Provided an operator has designated one single quality management unit to ensure that a quality system is applied uniformly throughout an entire operation.".

Amendment of Part 139 of the Regulations

9. Part 139 of the Regulations is hereby amended by –

(a) the substitution in regulation 139.01.4 for paragraphs (b) and (c) of the following paragraphs:

"(b) issuing of an aerodrome licence in terms of regulation **[139.02.16;]**139.02.5;
(c) renewal of an aerodrome licence in terms of regulation **[139.02.17;]** 139.02.8;";

(b) the substitution in sub-regulation (1) of regulation 139.01.10 for the words preceding paragraph (a) of the following words:

"(1) Whenever in the Republic any light or pattern of lights including laser beams is exhibited –.".

(c) the renumbering in regulation 139.01.17 of the second sub-regulation (2) as sub-regulation (3) and the insertion of the following sub-regulation:

"(4) An aerodrome operator shall monitor an aircraft stand to ensure that the recommended clearance distances are applied to an aircraft using the stand.";

(d) the addition in regulation 139.01.18 after sub-regulation (2) of the following sub-regulations:

"(3) An aerodrome operator shall, when justified by the volume of traffic and operating conditions as determined after a risk assessment, provide an apron management service in order –

(a) to control movement with the objective of preventing collisions between aircraft, between aircraft and vehicles, and between aircraft and obstacles;
(b) to control entry of aircraft into, and out of the apron with the assistance of an aerodrome control tower; and
(c) to ensure safe and expeditious movement of vehicles.

(4) An aerodrome operator shall establish procedures to facilitate the orderly transition of aircraft between an apron management unit and ATSU.

(5) An apron management service referred to in sub-regulation (3) shall be provided with radiotelephony for communication";

(e) the numbering in regulation 139.01.19 of the existing sub-regulation as sub-regulation (1) and the addition of the following sub-regulations:

"(2) During low visibility, persons and vehicles operating on an apron shall be restricted to the minimum numbers essential for operations.

(3) All vehicles and pedestrians shall give way to aircraft except emergency vehicles proceeding to the assistance of an aircraft in distress.

(4) A vehicle operating on an apron shall give way –

(a) to an emergency vehicle, an aircraft taxiing, about to taxi or being pushed or towed; and

(b) to other vehicles in accordance with the National Road Traffic Act, 1996 (Act No. 93 of 1996) and its associated regulations.";

(f) the substitution in regulation 139.01.21 of sub-regulation (3) for the following sub-regulation:

"(3) An air service operator shall provide a cabin crew member equipped with a fire extinguisher at each door if aircraft refuelling is performed with passengers on board or passengers boarding an aircraft.

(g) the addition in regulation 139.01.21 of the following sub-regulation (6):

"(6) When aircraft refuelling operations take place while passengers are embarking, on board or disembarking, ground equipment shall be positioned as prescribed in Document SA-CATS 139.";

(h) the substitution for regulation 139.01.23 of the following regulation:

"Supply of fuel to aircraft

139.01.23 (1) On a licenced aerodrome, fuel may be supplied to aircraft only at a place and in a manner approved by an aerodrome operator and in compliance with the requirements prescribed in Document SA-CATS 139, and subject to such conditions as such operator may consider necessary to safeguard persons or property on the aerodrome.

(2) An aerodrome operator shall have a refuelling procedure available at the aerodrome as prescribed in Document SA-CATS 139.

(3) An aerodrome operator shall ensure that the refuelling procedure referred to in sub-regulation (2) is distributed to fuelling operators approved for the specific aerodrome and ensure that these operators are conversant with the procedure.

(4) An aerodrome operator shall institute measures –

(a) to periodically monitor the refuelling process to ensure that compliance with the agreed procedure is maintained; and

(b) to address any identified non-conformance and keep records thereof.

(5) An aerodrome operator shall ensure that fixed installation refuelling facilities are provided with emergency cut-off switches that are clearly marked and situated in areas where it can be reached without danger to persons in the event of an emergency.

(6) An aerodrome operator shall ensure that all fuelling facilities are equipped with adequate and well maintained firefighting equipment.";

(h) the substitution for Subpart 2 of Part 139 of the following Subpart:

"SUBPART 2: LICENSING AND OPERATION OF AERODROMES

139.02.1 Requirements for licence

139.02.2 Application for licence or amendment thereof

139.02.3 Processing of application for licence or amendment thereof

139.02.4 Adjudication of application for licence or amendment thereof

139.02.5 Issuing of licence

SUBPART 2: LICENSING AND OPERATION OF AERODROMES

Requirements for licence

139.02.1 (1) An operator of an aerodrome intended for public use with scheduled commercial operations shall be in possession of a valid aerodrome licence issued in terms of this Partand as prescribed in Document SA-CATS 139.

(2) An aerodrome licence shall be issued or renewed subject to the aerodrome complying with these regulations.

Application for licence or amendment thereof

139.02.2 An application for issuing or amendment of an aerodrome licence shall be made to the Director in the appropriate prescribed form and accompanied by –

(a) an aerodrome manual referred to in regulation 139.02.11 for aerodrome licence with a Category 4 and higher;

(b) plans of an aerodrome;

(c) written approval from the local government concerned;

(d) an environmental impact report, if required in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998);

(e) written approval from all relevant government institutions listed in Document SA-CATS 139;

(f) proof that the applicant is financially capable of operating an aerodrome including the provision of firefighting service as contemplated in regulation 139.02.15, for aerodrome licence with a Category higher than 3;

(g) particulars of non-compliance with, or deviations from –

(i) appropriate aerodrome design, operation or equipment standards prescribed in this Part; or

(ii) appropriate airspace classification requirements prescribed in Part 172; and

(h) appropriate fee as prescribed in Part 187.

Processing of application for licence or amendment thereof

139.02.3 (1) The Director shall, as soon as practicable after the receipt of an application for an aerodrome licence, publish by notice in the Government *Gazette* the following particulars in respect of the application:

(a) full name of the applicant;

(b) full particulars of the location of the aerodrome;

(c) a date by which representations against or in favour of the application should be submitted to the Director; and

(d) any restrictions to the safe use of the aerodrome.

(2) Any person may, after the publication of the notice referred to in sub-regulation (1) submit written representation to the Director against or in favour of the application.

Adjudication of application for licence or amendment thereof

139.02.4 (1) The Director shall as soon as practicable, consider an application referred to in regulation 139.02.2 together with all representations and other documents relating to such application which are received within the period specified in the notice published in terms of regulation 139.02.3(1).

(2) The Director may grant the application if the Director is satisfied that –

(a) an applicant has suitable personnel and necessary competence and experience as prescribed in regulation 139.02.13 to operate and maintain an aerodrome safely and meet the duties as contemplated in regulation 139.02.22;

(b) an applicant's aerodrome manual, as contemplated in regulation 139.02.11 contains all of the relevant information as prescribed in regulation 139.02.11;

(c) the aerodrome facilities, services and equipment meet the required standards;

(d) the aerodrome operating procedures will result in the safe operations of aircraft and the safety of air navigation;

(e) acceptable safety and quality assurance systems are in place to ensure continued compliance with the requirements of this Part and the safe operation of an aerodrome; and

(f) granting the application will not jeopardise aviation safety.

Issuing of licence

139.02.5 (1) An aerodrome licence shall be issued on the appropriate prescribed form.

(2) An aerodrome licence shall specify –

(a) a category for which an aerodrome is licensed; and

(b) restrictions, if any, relating to non-compliance with, or deviations from –

(i) appropriate aerodrome design, operation or equipment standards prescribed in this Part; and

(ii) appropriate airspace classification requirements prescribed in Part 172.

Period of validity

139.02.6 (1) An aerodrome licence shall be valid for a period determined by the Director based on individual aerodrome risk assessment, which period shall not exceed five years calculated from the date of issuing or renewal.

(2) An aerodrome licence shall remain valid until it expires or is suspended or downgraded by an authorised officer, inspector or authorised person, or cancelled by the Director.

(3) A holder of an aerodrome licence which is suspended shall forthwith hand the licence to the authorised officer, inspector or authorised person for appropriate endorsement.

(4) A holder of an aerodrome licence which is cancelled, shall, within 30 days from the date on which the licence is cancelled, surrender such licence to the Director.

Non-transferability

139.02.7 (1) An aerodrome licence shall not be transferable.

(2) A change in ownership of the holder of a licence shall be deemed to be a change of significance and requires a new licence.

Renewal of licence

139.02.8 (1) An application for the renewal of an aerodrome licence shall be made to the Director in the appropriate prescribed form and accompanied by –

(a) an updated aerodrome manual referred to in regulation 139.02.11;

(b) proof of level of fire services to be provided;

(c) particulars of non-compliance with, or deviations from –

(i) appropriate aerodrome design, operation or equipment standards prescribed in this Part; or

(ii) appropriate airspace classification requirements prescribed in Part 172; and

(d) appropriate fee as prescribed in Part 187.

(2) A holder of an aerodrome licence shall, at least 60 days immediately preceding the date on which such licence expires, apply for the renewal of such licence.

Licence of intent

139.02.9 (1) Where a particular area has been officially demarcated at the appropriate institutional level as contemplated in sub-regulation (2)(c) for the development of an aerodrome, an applicant for an aerodrome licence in respect of the aerodrome, may apply to the Director for the issuing of a licence of intent for such area.

(2) An application for a licence of intent shall be made to the Director on the appropriate prescribed form and accompanied by –

(a) full particulars of the area demarcated for the development of the aerodrome, and the location thereof;

(b) appropriate fee as prescribed in Part 187;

(c) written approval of the intended aerodrome development from the following institutions:

(i) for private aerodromes, approval from the relevant local authority;

(ii) for aerodromes intended for commercial domestic operations, approval from the relevant provincial authority; and

(iii) for international aerodromes, approval from the Department of Transport;

(d) written comments from the national ATS provider regarding the impact on the existing airspace management and the feasibility of accommodating the intended aerodrome development in the ATM system; and

(e) an environmental impact report, if required in terms of any applicable legislation.

(3) The Director may grant an application and issue a licence on the appropriate prescribed form if the Director is satisfied that the application complies with the requirements prescribed in sub-regulations (1) and (2) and that the development of the aerodrome will not jeopardize aviation safety.

(4) A licence of intent shall specify the conditions and the restrictions which the Director considers necessary in the interests of aviation safety.

(5) A licence of intent is –

(a) not transferable;

(b) valid for the period determined by the Director, which period shall not exceed five years, calculated from the date on which the licence is issued;

(c) not a prerequisite for the issuing of a subsequent aerodrome licence; and

(d) not a guarantee that an aerodrome licence shall be granted.

Aerodrome design requirements

139.02.10 (1) An applicant for an aerodrome licence shall ensure, taking into account the risk assessment, that the aerodrome is provided with –

(a) the following physical characteristics:

(i) runway;

(ii) runway shoulders;

(iii) runway turn pads;

(iv) runway strips;

(v) runway end safety areas;

(vi) clearways;

(vi) stop ways;

(vii) radio altimeter operating area;

(viii) taxiways;

(ix) taxiway shoulders;

(x) taxiway strips;

(xi) holding bays, runway-holding positions, intermediate holding positions and road holding positions;

(xii) aprons; and

(xiii) isolated aircraft parking position;

(b) obstacle limitation surfaces;

(c) visual aids for navigation in the following manner:

(i) indicators and signalling devices;
(ii) markings;
(iii) lights;
(iv) signs;
(v) markers;

(d) visual aids for the following denoting obstacles:
(i) objects to be marked or lighted; and
(ii) marking or lighting of objects;

(e) visual aids for denoting the following restricted areas:

(i) closed runways and taxiways or parts thereof;
(ii) non- load bearing surfaces;
(iii) pre-threshold area;
(iv) unserviceable areas.

(f) equipment and installations;

(g) an airspace classification referred to in Part 172;

(h) an appropriate level of firefighting service consistent with the characteristics of aircraft intended to be served, the lowest meteorological minima for each runway, and the ambient light conditions during the operation of aircraft; and

(i) adequate primary power supply for the safe functioning of air navigation facilities, that shall be arranged so that the facilities are automatically connected to the secondary power supply on failure of the primary source of power: Provided that the time interval between failure of the primary source of power and the complete restoration of the services shall be as prescribed in Document SA-CATS 139.

(2) Physical characteristics, obstacle limitation surfaces, visual aids, and equipment and installations provided at an aerodrome shall comply with the appropriate aerodrome design standards and colour specifications as prescribed in Document SA-CATS 139.

(3) Electrical installations and equipment other than those forming part of aerodrome ground lighting shall comply with relevant South African national standards and the Occupational Health and Safety Act, 1993, (Act 85 of 1993).

(4) For an aerodrome licence with a Category 1 to 3, the applicability of the design standards mentioned in sub-regulations (1) and (2), is determined on the basis of an individual risk assessment of the intended or actual operations, whichever poses the highest risk, while also considering international best practice.

(5) The holder of an aerodrome licence used for international operations shall –

(a) provide a runway lead-in lighting system as prescribed in Document SA-CATS 139, to provide positive visual guidance along a specific approach path, generally a curved one, where problems exist with –

(i) hazardous terrain;

(ii) obstructions; and

(iii) noise abatement procedures; and

(b) ensure that an aerodrome has surface movement guidance and control system commensurate with the level of operation as determined by the Director and as prescribed in Document SA-CATS 139.

(6) In instances where stop bars are specified as components of an advanced surface movement guidance and control system and where a higher intensity is required to maintain ground movements at a certain speed in very low visibilities or in bright daytime conditions, the intensity in red light and beam spreads of stop bar lights shall be in accordance with the specifications as prescribed in Document SA-CATS 139.

(7) In instances where taxiway centre line lights are specified as components of an advanced surface movement guidance and control system, and where a higher intensity is required to maintain ground movements at a certain speed in very low visibilities or in bright daytime conditions, taxiway centre line lights shall be in accordance with the specifications as prescribed in Document SA-CATS 139.

(8) Surfaces of aircraft movement area provided at an aerodrome shall be designed to be able to carry the weight of the heaviest aircraft allowed to move on that aerodrome.

(9) Bearing strength for an aerodrome licensed with a Category higher than 3 shall be expressed in the method as prescribed in Document SA-CATS 139.

(10) An aerodrome reference code, code number and letter which is selected for aerodrome planning purposes shall be determined in accordance with the characteristics of the aircraft for which an aerodrome facility is intended as prescribed in Document SA-CATS 139.

Aerodrome manual

139.02.11 An applicant for an aerodrome licence with a Category higher than 3 or for an aerodrome where regular commercial operations are to be conducted shall, on the basis of a risk assessment, provide the Director with an aerodrome manual which shall contain –

(a) a statement by the accountable manager and compliance officer confirming that an aerodrome manual and any included manuals define the organisation of the applicant and demonstrate the procedures and methods for ensuring that the provisions of the regulations in this Part will be complied with at all times;

(b) particulars of the personnel referred to in regulation 139.02.13;

(c) an organisational chart showing lines of responsibility of the personnel referred to in regulation 139.02.13;

(d) restrictions on the use of the aerodrome referred to in regulation 139.01.3 or any other limitation considered necessary by the Director;

(e) a description of the characteristics of and the infrastructure available at the aerodrome, which, taking into consideration the restrictions or limitations referred to in paragraph (d), comply with the aerodrome design requirements referred to in regulation 139.02.10;

(f) aerodrome emergency management system referred to in regulation 139.02.14;

(g) a description of the aerodrome's rescue and firefighting capability which, taking into consideration restrictions or limitations referred to in paragraph (d), complies with the requirements prescribed in regulation 139.02.15;

(h) aerodrome environment management programme referred to in regulation 139.02.19;

(i) procedures for the notification of aerodrome data and

information referred to in regulation 139.02.21;

(j) quality assurance system referred to in regulation 139.02.12;

(k) a description of the security measures taken at the aerodrome to comply with the provisions of the Act ;

(l) procedures to control, amend and distribute the aerodrome manual;

(m) intended air traffic services and the associated airspace classification;

(n) safety procedures pertaining to all apron operations that are carried out on the aerodrome; and

(o) all pertinent information on the aerodrome site, facilities, services, equipment, operating procedures, organisation and management including a safety management system.

Quality assurance system

139.02.12 (1) An applicant for an aerodrome licence with a Category higher than 3, or for an aerodrome with an ATSU, shall establish a quality assurance system containing an aviation safety programme, for the control and supervision of the operation and maintenance of the aerodrome and its services and facilities in accordance with the requirements prescribed in this Subpart.

(2) The minimum standards for a quality assurance system shall be as prescribed in Document SA-CATS 139.

Personnel requirements

139.02.13 (1) An applicant for an aerodrome licence with a Category higher than 3, or an aerodrome with an ATSU, shall engage, employ or contract –

(a) a senior person identified in writing as the accountable manager and compliance officer, to whom contractual authority has been granted to ensure that all activities undertaken at an aerodrome are carried out in accordance with the applicable requirements prescribed in this Subpart, and who shall in addition be vested with the following powers and duties in respect of the compliance with such requirements:

(i) unrestricted access to work performed or activities undertaken by all other persons as employees of, and other persons rendering services under contract with, the organisation;

(ii) full rights of consultation with any such person in respect of such compliance by him or her;

(iii) powers to order cessation of any activity where such compliance is not effected;

(iv) a duty to establish liaison mechanisms with the Director with a view to ascertain correct manners of compliance with the said requirements, and interpretation of such requirements by the Director, and to facilitate liaison between the Director and the organisation concerned; and

(v) powers to report directly to the management of the organisation on his or her investigations and consultations generally, and in cases contemplated in subparagraph (iii), and with regard to the results of the liaison contemplated in subparagraph (iv); and

(vi) a duty to establish and implement a runway safety programme;

(b) a competent person in writing who is responsible for quality control, and who has direct access to the accountable manager and compliance officer referred to in paragraph (a) on matters affecting the aviation safety programme; and

(c) adequate personnel, including an aerodrome manager and ATS personnel, and sufficient and adequate rescue and firefighting personnel, to operate and maintain an aerodrome and its services and facilities according to the requirements prescribed in this Subpart.

(2) An applicant for aerodrome licence shall establish a procedure for initially assessing, and a procedure for maintaining, the competence of those personnel involved in operating and maintaining an aerodrome, its services and its facilities.

Establishment of aerodrome emergency management system

139.02.14 (1)(a) An applicant for an aerodrome licence that is required to submit an aerodrome manual in terms of regulation 139.02.11 shall establish an aerodrome emergency management system as prescribed in Document SA-CATS 139, designed to minimise the possibility and extent of personal injury and property damage on or in the vicinity of an aerodrome.

(b) For an aerodrome licence with a Category below 4 that is required to submit an aerodrome manual, the emergency management system may be limited to the risks associated with the particular aerodrome and the elements to

be covered are determined by the Director.

(2) An aerodrome emergency management system referred to in sub-regulation (1) shall provide for all types of emergencies likely to take place on or in the vicinity of an aerodrome and shall include –

(a) an index depicting all aspects contained in the system;

(b) types of emergencies planned for;

(c) procedures for periodic testing of the adequacy of the emergency management system plan and for reviewing the results in order to improve its effectiveness;

(d) call out procedures for prompt response to emergencies planned for;

(e) the role of agencies and persons involved in executing the allocated tasks;

(f) sufficient detail to provide adequate guidance to each person responsible for executing such system;

(g) provision for a fully equipped emergency operations centre and command post for each type of emergency which may be encountered;

(h) a description of all available rescue and medical equipment and the location of such equipment;

(i) information on the particulars of personnel and persons to be contacted in the case of a particular emergency;

(j) a grid map of the aerodrome indicating available water resources and other landmarks of significance;

(k) a grid map indicating of the aerodrome and its surrounding up to a radius of ten kilometres indicating the location of hospitals, clinics, water resources and road layout;

(l) a coordinator designated to implement the emergency management system plan when necessary;

(m) characteristics of the aircraft that may be expected to operate; and

(n) arrangements for rapid receipt of aircraft recovery equipment available locally, or from other aerodromes.

Aerodrome rescue and firefighting

139.02.15 (1) An applicant for, or a holder of an aerodrome licence with a Category higher than 2 shall ensure that an aerodrome is provided with a rescue and firefighting service capable of providing the required level of protection necessary for maintaining the minimum level of protection required for the appropriate category of aerodrome.

(2) The level of protection provided at an aerodrome for rescue and firefighting services shall be equal to the aerodrome category determined using the principles prescribed in Document SA-CATS 139.

(3) A complementary extinguishing agent to be used on rescue and firefighting vehicles shall be a dry chemical powder suitable for extinguishing hydrocarbon fires as prescribed in Document SA-CATS 139.

(4) The amount of water for foam production and the complementary agents to be provided on rescue and firefighting vehicles shall be in accordance with the aerodrome category determined in Document SA-CATS 139.

(5) When a combination of different performance level foams is provided at an aerodrome, the total amount of water to be provided for foam production shall be calculated for each foam type and the distribution of these quantities shall be documented for each vehicle and applied to the overall rescue and firefighting requirements as prescribed in Document SA-CATS 139.

(6) A discharge rate for foam solution and complementary agents shall be equal to or more than the quantities as prescribed in Document SA-CATS 139.

(7) The complementary extinguishing agent used in the firefighting service shall comply with the appropriate specifications as prescribed in Document SA-CATS 139.

(8) An aerodrome operator shall ensure that an aerodrome has fully operational rescue and firefighting vehicles and equipment as prescribed in Document SA-CATS 139.

(9) Rescue and firefighting vehicles shall be housed in a fire station or undercover to protect them against adverse weather.

(10) The operational objective of the rescue and firefighting service shall be to achieve a response time not exceeding three minutes to any point of each operational runway, in optimum visibility and surface conditions.

(11) A task resource analysis shall be completed for the staffing levels to determine the minimum number of rescue and firefighting personnel required.

(12) All responding aerodrome rescue and firefighting personnel shall be provided with full protective clothing and respiratory equipment to enable them to perform their duties in an effective manner.

(13) Any vehicle, other than the first responding vehicle, required to deliver extinguishing agents shall ensure continuous agent application and shall arrive no more than four minutes from the initial call.

(14) A system of preventive maintenance of rescue and firefighting vehicles shall be implemented to ensure effectiveness of the equipment and compliance with the specified response time throughout the lifespan of the vehicle as prescribed in Document SA-CATS 139.

(15) Emergency access roads shall be provided to facilitate achieving minimum response times and to support the heaviest emergency vehicle and shall be accessible in all weather conditions.

(16) Roads within 90m of the runway shall be tarred/compacted to prevent surface erosion and transfer of debris to the runway.

(17) A satellite fire station shall be provided whenever the response time cannot be achieved from a single fire station.

(18) A fire station shall be located so that access for rescue and firefighting vehicles into the runway area is direct and clear, requiring a minimum number of turns.

(19) An aerodrome operator shall install a discrete alerting communication system linking a fire station with the control tower, to any other fire station on the aerodrome, and to rescue and firefighting vehicles.

(20) A minimum number of rescue and firefighting vehicles provided at an aerodrome shall be in accordance with the requirements stipulated in Document SA-CATS 139.

Aerodrome rescue and firefighting training facility

139.02.16 (1) A holder of an aerodrome licence with a Category 6 or higher, with more than 700 total scheduled commercial air transport movements during the busiest consecutive three months, shall establish a training facility simulating an aircraft structure that makes provision for effective training standards as prescribed in Document SA-CATS 139.

(2) A training facility referred to in sub regulation (1) shall give effect to the personnel training standards provided for in Document SA-CATS 139.

Aerodrome rescue and firefighting personnel training

139.02.17 (1) A holder of an aerodrome licence shall establish an aerodrome rescue and firefighting services personnel training standards as prescribed in Document SA-CATS 139.

(2) A holder of an aerodrome licence shall ensure that all rescue and firefighting personnel are properly trained to perform their functions in an efficient manner.

(3) For an aerodrome licence with a Category 6 and higher, the firefighting personnel shall participate in live fire drills commensurate with types of aircraft and types of rescue equipment used at the aerodrome including pressure fed fires.

(4) Rescue and firefighting personnel training shall include training in human performance and team coordination shall be monitored.

Aerodrome rescue and firefighting deviations

139.02.18 (1) A holder of an aerodrome licence may deviate from a requirement prescribed in this Subpart and in Document SA-CATS 139 to the extent required to attend to an emergency arising from any aviation accident or incident which occurs within a radius of 10 kilometres of an aerodrome.

(2) A deviation in terms of sub-regulation (1) shall only be permitted –

(a) for the period during which the emergency exists; and

(b) for the sole purpose of protecting life or property.

(3) A holder of an aerodrome licence shall ensure that the remainder of the rescue and firefighting personnel and equipment will be able to attend to any possible aviation accident or incident which may occur as a result of the emergency referred to in sub-regulation (1) until assistance is obtained from other participants in the aerodrome emergency management system.

(4)(a) If a holder of an aerodrome licence has to deviate from a required standard, an ATSU shall be informed of the deviation and the licence holder shall indicate to what category the remainder of the service can be provided until the required service commensurate with the aerodrome licence is re-instated.

(b) An ATSU shall convey a deviation referred to in paragraph (a) to all arriving and departing aircraft to enable a PIC to clearly indicate whether they

accept the lower category of firefighting service prior to commencement of a flight or before landing.

(5) A holder of an aerodrome licence who deviates in terms of sub-regulation (1) from a requirement prescribed in this Subpart, shall –

(a) notify the Director immediately of the nature of the emergency and the extent of
the deviation; and

(b) submit a comprehensive report to the Director within 14 days from the date on which the emergency arose.

Establishment of aerodrome environment management programme

139.02.19 (1) Subject to the provisions of the National Environmental Management Act, 1998 (Act 107 of 1998), a holder of an aerodrome licence with a Category higher than 3, shall, in the area within its authority, establish an aerodrome environment management programme –

(a) where any foreign object debris, oil and fuel spillage, bird and wildlife presents or is likely to present a hazard to aircraft operating to or from an aerodrome; or

(b) where any aviation operation which is likely to impact on the environment is conducted.

(2) A holder of an aerodrome licence referred to in sub-regulation (2) shall ensure that the EMP –

(a) is kept on site and clearly indicates all identified environmental issues that may affect operations or the environment; and

(b) meets the requirements prescribed in Document SA-CATS 139.

(3) The Director may, in the interest of aviation environmental protection, issue a directive or notice regarding the establishment of consultative environmental committee for an aerodrome of any category in order that the objects of the Act and the regulations may be achieved.

(4) A holder of an aerodrome licence with a Category higher than 3, shall record and report all known bird and wildlife strike incidents occurring on and in the vicinity of the aerodrome and submit on monthly basis statistical data of such incidents to the Director.

(5) A holder of the aerodrome licence shall assess wildlife strike hazards in the vicinity of an aerodrome through –

(a) the establishment of a procedure for recording and reporting bird

and wildlife strikes to aircraft as prescribed in Document SA-CATS 139;

(b) the collection of information from aircraft operators, aerodrome operators, land developers and other sources on the presence of birds and wildlife around the aerodrome constituting a potential hazard to aircraft operations; and

(c) an ongoing evaluation of the wildlife hazard by competent personnel.

(6) An aerodrome licence holder shall take action to decrease the risk to aircraft operations by adopting measures to minimize the likelihood of collisions between wildlife and aircraft as prescribed in Document SA-CATS 139.

(7) An aerodrome licence holder shall notify authorities responsible for waste disposal of any source which may attract wildlife to the aerodrome or in its vicinity.

(8) An aerodrome operator shall ensure, based on an appropriate wildlife assessment, that any risk to aircraft posed by waste disposal dump sites is assessed as prescribed in Document SA-CATS 139 and reduced to as low as reasonably practicable.

(9) A holder of an aerodrome licence shall record, treat and submit on monthly basis statistical data of all noise complaints and oil and fuel spillages that may cause danger to environment or disruption to operations, to the Director.

Maintenance of aerodrome environment management programme

139.02.20 A holder of an aerodrome licence shall –

(a) maintain and comply with the aerodrome environment management programme referred to in regulation 139.02.19; and

(b) operate an aerodrome in accordance with the provisions of the National Environmental Management Act, 1998 and the regulations made thereunder, together with the recommendations and requirements prescribed in any relevant Specifications or Codes of Practice published under the Standards Act, 1993 (Act No. 29 of 1993).

Notification of aerodrome data and information

139.02.21 (1) A holder of an aerodrome licence shall establish a procedure to notify the relevant ATSU and the Director –

(a) of aerodrome data and information;

(b) of any restriction or limitation on the use of the aerodrome contemplated in regulation 139.01.3;

(c) of compliance with the requirements prescribed in regulation 139.02.15 or deviation therefrom;

(d) as soon as possible, of any change which may affect the use of the aerodrome, including the presence of standing water and reduced friction on the runway as prescribed in Document SA-CATS 139; and

(e) any other information required in terms of Part 175.

(2) A notification contemplated in sub-regulation (1) shall be made on the appropriate prescribed form.

Changes in quality assurance system

139.02.22 (1) If a holder of an aerodrome licence desires to make any change in the quality assurance system referred to in regulation 139.02.12, which is significant to the showing of compliance with the appropriate requirements prescribed in this Part, such holder shall apply to the Director for the approval of such change.

(2) The provisions of regulation 139.02.12 apply with the necessary changes to an application for the approval of a change in the quality assurance system.

(3) An application for the approval of a change in the quality assurance system shall be granted by the Director if the applicant satisfies the Director, upon submission of appropriate proposed changes to his, her or its operations manual, that the applicant will continue to comply with the provisions of regulations 139.02.10 to 139.02.18 inclusive, after the implementation of such approved change.

General duties of holder of licence

139.02.23 (1) A holder of an aerodrome licence shall –

(a) hold at least one complete and current copy of approved manuals referred to in this Subpart, at the aerodrome;

(b) comply with all procedures detailed in such approved manuals;

(c) make each applicable part of such approved manuals available to the personnel who require those parts to carry out their duties; and

(d) continue to comply with the appropriate requirements prescribed in this Part.

(2) A holder of aerodrome licence shall ensure that –

(a) an aerodrome is maintained in a serviceable condition by –

(i) developing and implementing, for an aerodrome licence with a Category higher than 3 an aerodrome maintenance programme and procedures; and

(ii) checking the precision approach path indicator elevation settings, vertical angle and flight checks as prescribed in Document SA-CATS 139;

(b) an aerodrome is kept free of unauthorised persons, vehicles or animals which are not under proper control and management, in compliance with the Act;

(c) all significant obstructions are marked as prescribed in Document SA-CATS 139;

(d) the Director is informed of any alterations to or obstructions or workings on the aerodrome;

(e) an apparatus showing the surface direction of the wind, is installed and functions satisfactorily;

(f) VHF direction finding equipment is installed where an ATSU is present on an aerodrome and that it functions satisfactorily to the requirements and specifications as prescribed in Document SA-CATS 139. This requirement may be omitted if an ATSU is serviced by primary radar surveillance;

(g) markings are maintained in a conspicuous condition, readily visible to aircraft in the air or manoeuvring on the ground;

(h) facilities offered to the public are available and in a serviceable condition;

(i) all apparatus installed by such holder to promote safety in flight, are functioning efficiently;

(j) unserviceable areas on the landing terrain are appropriately marked as prescribed in Document SA-CATS 139;

(k) the Director is informed whenever an aerodrome becomes unserviceable through any cause or whenever any portion of the surface of the landing area deteriorates to such extent that the safety of aircraft may be endangered;

(l) when an aerodrome becomes unserviceable as contemplated in

paragraph (k), aircraft operations are limited to those portions of an aerodrome not rendered unsafe by the existing condition;

(m) such reports on the condition of an aerodrome as may be required from time to time by the Director, are submitted;

(n) particulars of a Foreign Operator's Permit are obtained and verified, in the case where a foreign aircraft which is used by virtue of such Foreign Operator's Permit issued in terms of the International Air Services Act, 1993 (Act No. 60 of 1993), lands at the aerodrome;

(o) for aerodromes with instrument flight procedures, an annual survey conducted by a registered surveyor is carried out on an aerodrome for the purposes of the maintenance or approval of procedures by the Director or whenever any significant change occurs;

(p) sensing equipment which complies with the technical specifications prescribed in Document SA-CATS 139 is installed to provide data to an ASTU where an ATSU is present on an aerodrome or where scheduled commercial operations are conducted, or where unscheduled commercial operations exceeding six movements a week are conducted and the MCM of aircraft involved exceeds 5700 kg;

(q) the data referred to in paragraph (p) –

(i) shall be displayed in an ATSU and aeronautical meteorological station where applicable; and

(ii) where an ATSU is not in operation and where scheduled commercial operations occur, such data shall be transmitted automatically to a minimum range of 5nm from an aerodrome reference point;

(r) if an aerodrome is used for supporting pilot training operations, wind direction, speed, surface air temperature and barometric pressure data are made available at a location accessible to pilots prior to take off;

(s) if an aerodrome is used for international flights, satisfactory office facilities are available for an aeronautical meteorological station;

(t) the surface of a runway is maintained in a condition such as to prevent formation of harmful irregularities;

(u) for an aerodrome licence with a Category higher than 3, measurements of the friction characteristics of a runway surface are made with a continuous friction measuring device using self-wetting features, in accordance with the minimum friction survey frequency as prescribed in Document SA-CATS 139;

(v) corrective maintenance action is taken to prevent runway surface friction characteristics for the entire runway or a portion thereof

from falling below a minimum friction level prescribed in Document SA-CATS 139;

(w) when there is a reason to believe that drainage characteristics, for either the whole runway or a portion thereof, are poor due to slopes or depressions, that the runway friction characteristics are assessed under natural or simulated conditions which are representative of local precipitation conditions, and that, corrective maintenance action is taken as necessary;

(x) a surface of a paved runway is maintained in such condition so as to provide good friction characteristics and low rolling resistance and the overlay shall be constructed and maintained above the minimum friction level specified in Document SA-CATS 139;

(y) snow, slush, ice, standing water, mud, dust, sand, oil, rubber deposits and other contaminants are completely removed as rapidly as possible to minimise accumulation;

(z) taxiways are kept clear of contaminants referred to in paragraph (y) to the extent necessary to enable aircraft to be taxied to and from an operational runway;

(aa) aprons are kept clear of contaminants to the extent necessary to enable aircraft to manoeuvre safely or, where appropriate, to be towed or pushed;

(bb) whenever the clearance of contaminants from various parts of the movement area cannot be carried out simultaneously, the order of priority after the runway(s) in use shall be set in consultation with the affected parties and documented in a plan;

(cc) chemicals used to remove or to prevent the formation of ice and frost on aerodrome pavements are used when conditions indicate their use could be effective;

(dd) caution is exercised in the application of the chemicals so as not to create a more slippery condition; and

(ee) for aerodrome licence with a Category 4 and higher, a full set of regulations that contain the latest amendments are available at the aerodrome;

(3) A holder of an aerodrome licence shall –

(a) in the case of an aerodrome licence with a Category 4 and higher, furnish the Director with aerodrome financial data and aerodrome traffic statistics as prescribed in Document SA-CATS 139;

(b) in the case of aerodrome which serves aircraft used in international air transport operations, establish a facilitation

committee and compile a facilitation plan in accordance with the requirements and standards as prescribed in Document SA-CATS 139;

(c) be responsible for handling of aircraft noise complaints related to an aerodrome and may, subject to such conditions and limitations as the Director may prescribe in the interest of aviation environmental protection, be required to –

(i) conduct appropriate aircraft noise studies to determine whether a noise problem exists at an aerodrome;

(ii) calculate and predict aircraft noise contours in accordance with the requirements and standards as prescribed in Document SA-CATS 139;

(iii) adopt a balanced approach to noise management in accordance with the requirements and standards as prescribed in Document SA-CATS 139;

(iv) install aircraft noise monitoring stations and equipment to monitor adherence to aircraft flight track in accordance with the requirements and standards as prescribed in Document SA-CATS 139;

(v) report violations of noise abatement operating procedures and non-adherence to aircraft flight trajectories, to the Director, in accordance with the requirements and standards as prescribed in Document SA-CATS 139;

(d) when an ATSU at an aerodrome is not in operation, be responsible for the maintenance of flying discipline on, and in the vicinity of, such aerodrome;

(e) furnish in writing to the Director as soon as practically possible, but within thirty days from the day of engagement or employment, full particulars of accountable manager and compliance officer referred to in regulation 139.02.13;

(f) for an aerodrome licence with a Category 4 and higher, furnish the Director with the bearing strength of a pavement on completion of the construction, or whenever major repair work has been conducted which affects the pavement bearing strength;

(g) report the following information on an annual basis regarding aerodrome data:

(i) aeronautical data;

(ii) aerodrome reference point;

(iii) aerodrome and runway elevations;

(iv) aerodrome reference temperature;

(v) aerodrome dimensions related information;

(vi) strength of pavements;

(vii) pre-flight altimeter check location;

(viii) declared distances;

(ix) condition of the movement area related facilities;

(x) disabled aircraft removal procedures;

(xi) rescue and firefighting; and

(xii) precision approach path indicator;

(h) furnish the Director on monthly basis with the statistical data of incidents and accidents occurring on the airside of an aerodrome as prescribed in Document SA-CATS 139;

(i) on an annual basis, for aerodromes with instrument flight procedures or aerodrome licence with a Category 4 and higher, conduct a survey on all obstacles that have an impact on the obstacle limitation surfaces on and in the vicinity of an aerodrome utilising a registered surveyor and ensure that the report of the survey is provided to the Director before the annual renewal licence inspection.

(4) (a) A holder of an aerodrome licence shall ensure that –

(i) all originating hold baggage are screened prior to being loaded onto the aircraft;

(ii) an operator of an air service from that aerodrome does not carry any originating hold baggage unless such baggage has been screened prior to being loaded into an aircraft.

(b) The minimum requirements for the screening referred to in paragraph (a) are as prescribed in Document SA-CATS 121.

(5) A holder of an aerodrome aerodrome licence shall determine procedures to ensure that personnel operating on airside wear high visibility clothing at all times whilst on airside.

Works on aerodrome

139.02.24 (1) A holder of an aerodrome licence shall establish procedures and take precautions as prescribed in Document SA-CATS 139 to ensure that work carried out on an aerodrome does not endanger any aircraft operation.

(2) Hot work or work with an open flame shall not be performed on the airside of an aerodrome without notifying the firefighting services and all other affected parties of –

(a) the type of work to be performed;

(b) the location where this work will be performed; and

(c) the expected duration of the work to be performed.

(3) If considered necessary by an aerodrome licence holder, or if the type of work may have an impact on aviation safety, firefighting service shall be on standby during any hot work or work with an open flame until the work is completed.

Maintenance of aerodrome emergency management system

139.02.25 A holder of an aerodrome licence shall –

(a) establish procedures to ensure that all participants to the effectiveness of an aerodrome emergency management system with allocated duties or responsibilities, are familiar with, and are properly trained for, their assignments and shall –

(i) submit such aerodrome emergency management system to the Director for approval;

(ii) provide a copy of the approved aerodrome emergency management system to the South African Search and Rescue coordination centre in accordance with the South African Maritime Search and Rescue Act, 2002 (Act No. 44 of 2002);

(iii) provide a copy of approved aerodrome emergency management system to the Provincial Disaster Management Centre in accordance with the Disaster Management Act, 2002 (Act No. 57 of 2002);

(b) test the effectiveness of aerodrome emergency management system by –

(i) undertaking a full-scale aerodrome emergency exercise at intervals not exceeding two years;

(ii) arranging special emergency exercises in the intervening year to correct any deficiencies identified during the full-scale aerodrome emergency exercise;

(iii) performing a desk top exercise with intervals not exceeding three months to verify role players, contact detail and other vital information required to ensure that the current

aerodrome emergency management system is up to date; and

(iv) establish procedure to handle all communicable diseases as depicted in Document SA-CATS 139;

(c) submit a comprehensive written report to the Director within 14 days from the date on which –

(i) a full-scale aerodrome emergency exercise referred to in paragraph (b) (i); or

(ii) special emergency exercise referred to in paragraph (b) (ii), has been undertaken or arranged; and

(iii) notify the Director and all other role-players of all changes referred to in paragraph (b)(iii) to aerodrome emergency management system with intervals not exceeding three months;

(d) review aerodrome emergency management system for effectiveness after each of the exercises referred to in paragraph (b), as well as after an actual emergency, to address any deficiencies identified and to adapt such system for the enhancement of its efficiency.

Aerodrome inspection programme

139.02.26 (1) To ensure compliance with the requirements of this Subpart, a holder of an aerodrome licence shall establish and maintain an aerodrome inspection programme, which shall include –

(a) procedures to ensure that job specific competent aerodrome personnel execute the relevant programme effectively; and

(b) a reporting system to ensure prompt correction of unsafe aerodrome conditions noted during any inspection.

(2) The contents of the aerodrome inspection programme referred to in sub-regulation (1) shall be as prescribed in Document SA-CATS 139.

Demarcation of restricted area

139.02.27 (1) A holder of an aerodrome licence shall demarcate a restricted area on an aerodrome and indicate its boundaries by means of –

(a) markings on the surface of such aerodrome;

(b) obstructions or notices erected along the boundaries of such restricted area or a fence commensurate with the level of threat; or

(c) a combination of such markings, fences, obstructions or notices to achieve the desired level of control.

(2) Subject to the provisions of sub-regulation (1) relating to the manner in which a boundary shall be indicated, a holder of an aerodrome licence may alter any boundary or any portion of a boundary of a restricted area.

(3) Fences or obstructions or notices erected along the boundaries of a restricted area shall have emergency access gates inline or as close as possible to the threshold of all available runways to ensure an acceptable response times can be met.

(4) Emergency gates referred to in sub-regulation (3) shall not be used for gaining access to an aerodrome but solely for emergencies inside or outside an aerodrome perimeter. The control of these emergency gates shall be the responsibility of firefighting service.

Control of entry into restricted area

139.02.28 (1) A holder of an aerodrome licence shall exercise control over entry into a restricted area according to the procedures and criteria approved by such holder.

(2) An authorised officer, inspector or authorised person may –
(a) prohibit any person from entering a restricted area; or
(b) order any person to leave a restricted area immediately, whether such person has been granted permission to be within a restricted area or not.

(3) A fence or other suitable barrier or procedure shall be provided on an aerodrome in an environmental protected area in order to –
(a) prevent the entrance to the movement area of animals large enough to be a hazard to aircraft; and
(b) deter the inadvertent or premeditated access of an unauthorised person onto a non-public area of an aerodrome.

(4) Suitable means of protection shall be provided to deter the inadvertent or premeditated access of an unauthorised person into ground installations and the facilities located off an aerodrome, which is essential for the safety of civil aviation.

(5) If installed in terms of sub-regulation (4), the fence or barrier shall be located so as to separate the movement area and other facilities or zones on an aerodrome vital to the safe operation of aircraft from areas open to public access.

(6) When greater security is deemed necessary –

(a) a cleared area should be provided on both sides of the fence or barrier to facilitate the work of patrols, and to make trespassing more difficult; and

(b) consideration should be given to the provision of a perimeter road inside the fencing for use of both the maintenance personnel and security patrols.

(7) An aerodrome shall, where it is deemed a requirement in terms of the security risk assessment, have lights at a minimum essential level located in such a way that the ground area on both sides of the fence or barrier, particularly at the access points, is illuminated.

(8) During low visibility operation procedures, a holder of an aerodrome licence shall restrict construction or maintenance activities in the proximity of aerodrome electrical systems as prescribed in Document SA-CATS 139.

Demarcation of routes on apron

139.02.29 (1) A holder of an aerodrome licence shall, by means of markings on the surface of an aerodrome or by notices, or by means of both such markings and notices, demarcate routes on the apron for use by –

(a) persons other than a person carried in an aircraft or in or on a vehicle;

(b) aircraft travelling on the surface of an aerodrome; or

(c) vehicles and equipment.

(2) A holder of an aerodrome licence may restrict any route referred to in sub-regulation (1) to be used for the purpose of movement in one direction only.

(3) Save in an emergency and except along an appropriate route demarcated in terms of sub-regulation (1), a person may not proceed on foot on the apron or move an aircraft or a vehicle on the apron.

(4) A holder of an aerodrome licence must provide the minimum clearance between an aircraft using an aircraft stand and any adjacent building, any other aircraft parked on another aircraft stand, or any other object as prescribed in Document SA-CATS 139.

Safety measures against fire

139.02.30 (1) A holder of an aerodrome licence shall establish preventative measures against possible fires on the aerodrome and identify a person or group or persons in writing to maintain a fire prevention programme for an aerodrome and aerodrome buildings.

(2) If the aerodrome has no fire brigade service designated in terms of the Fire Brigade Services Act, 1987 (Act No. 99 of 1987), the holder of an aerodrome licence shall arrange with the local government concerned to maintain a fire prevention programme for aerodrome buildings on landside and to advise such holder of any dangerous conditions for rectification.

(3) Unless the local authority's persons received airside induction training, aerodrome rescue and firefighting services provider shall be responsible to ensure that fire prevention on airside is maintained, and shall keep proper record of inspections performed and rectification measures instituted.

(4) A holder of an aerodrome licence shall ensure that no unsafe practice is performed on an aerodrome or within its parameters.

(5) If unsafe practices have to be performed during any day-to-day maintenance of, or on, an aerodrome, a holder of an aerodrome licence shall alert the rescue and firefighting service provider concerned to be on standby for the duration of such practices.

Access of ground vehicles to aerodrome movement area

139.02.31 (1)A holder of an aerodrome licence shall –

(a) limit access to an aerodrome manoeuvring area of those ground vehicles which are necessary for aerodrome and aircraft operations;

(b) if an ATSU is in operation at an aerodrome, provide adequate procedures for the safe and orderly access to, and operation in the aerodrome manoeuvring area of ground vehicles, in order to ensure that each ground vehicle operating in an aerodrome manoeuvring area is controlled by –

(i) two-way radio communication between a vehicle and an ATSU;

(ii) if a vehicle has no radio, an accompanying escort vehicle with two-way radio communication with an ATSU; or

(iii) adequate measures including signs, signals or guards

for controlling a vehicle, if it is not practical to have two-way radio communication or escort vehicle;

(c) if an ATSU is not in operation at an aerodrome, provide adequate measures to ensure that ground vehicles operating in an aerodrome movement area are controlled by the signs, pre-arranged signals or standards as prescribed in Document SA-CATS 139; and

(d) ensure that each employee, tenant or contractor who operates a ground vehicle on any portion of an aerodrome is familiar with, and complies with, the rules and procedures for the operation of ground vehicles as prescribed in Document SA-CATS 139.

(2) A driver of a radio-equipped vehicle shall –

(a) establish satisfactory two-way radio communication with an aerodrome control tower before entering a manoeuvring area and with appropriate designated authority before entering the apron; and

(b) maintain a continuous listening watch on the assigned frequency when on the movement area.

(3) A driver of a vehicle operating on the manoeuvring area shall –

(a) be appropriately trained for the tasks to be performed;

(b) display a high degree of competence with respect to the use of radiotelephony phraseology;

(c) comply with the instructions issued by –

(i) the responsible ATSU, when on the manoeuvring area; and

(ii) an aerodrome licence holder, when on the apron.

(4) A driver of a vehicle on the movement area shall comply with all mandatory instructions conveyed by lights, and ground markings where applicable.

Protection of navigation aids

139.02.32 A holder of an aerodrome licence shall –

(a) prevent any construction on an aerodrome which may adversely affect the operation of any electronic or visual navigation aid or ATS facility on such aerodrome;

(b) prevent, as far as it is within the authority of such holder, any

interruption of visual or electronic signals of navigation aids;

(c) liaise with the local government concerned and the Director with regard to any structure higher than the obstacle limitation surfaces on or in the vicinity of an aerodrome; and

(d) ensure that navigation aids are provided with adequate and appropriate firefighting protection equipment.

Aerodrome abandoned or not maintained

139.02.33 (1) In order that adequate warning may be given to the users of an aerodrome, a holder of an aerodrome licence shall give the Director at least 60 days written notice of its intention to abandon an aerodrome or to discontinue its maintenance.

(2) If, after the expiry of the period of notice referred to in sub-regulation (1), an aerodrome is abandoned or is not being maintained in accordance with the conditions of its licence, a holder of an aerodrome licence shall remove, obliterate or modify all aerodrome markings as the Director may direct.

(3) On completion of the task, referred to in sub-regulation (2), a holder of an aerodrome licence shall surrender the licence to the Director.

Approval of airside driving training

139.02.34 A holder of an aerodrome licence with a Category higher than 3 shall establish a training manual and submit two complete copies thereof for approval by the Director as prescribed in Document SA-CATS 139.

Airside vehicle driving training standards

139.02.35 Training standards for airside vehicle driving as prescribed in Document SA-CATS 139 shall only be provided by an ATO approved in terms of Part 141.".

(i) the insertion of the following Subpart 6:

"SUBPART 6: REGISTRATION AND OPERATION OF UNLICENCED AERODROMES

Applicability

139.06.1 (1) Subject to sub-regulation (2), this Subpart applies to an aerodrome that is not required to be licensed in terms of Subpart 2.

(2) For the purposes of this Subpart, para-glider and hang-glider launch sites are not regarded as aerodromes.

(3) Registration of an aerodrome does not confer any right of use by a third party and permission has to be obtained from the owner for any use.

Requirements and conditions for registration of aerodromes

139.06.2 An owner of an aerodrome referred to in regulation 139.06.1(1) shall ensure that such aerodrome is registered as prescribed in this Subpart.

Registration and de-registration of aerodrome

139.06.3 Registration and de-registration an aerodrome shall be done on the Authority's website as prescribed in Document SA-CATS 139.

Register of aerodromes

139.06.4 The Director shall maintain a register of aerodromes registered in terms of this Subpart and shall make the register available for public access.".

Amendment of Part 145 of the Regulations

10. Part 145 of the Regulations is hereby amended by the insertion after regulation 145.02.17 of the following regulation:

"Drug and substance abuse management plan

145.02.18 (1)A holder of an AMO approval shall develop and implement a drug and substance abuse management plan to address drug and alcohol issues in relation to their potential effect on aviation safety.

(2) A plan referred to in sub-regulation (1) shall include the elements as prescribed in Document SA-CATS 145.".

Insertion of Part 178 of the Regulations

11. Part 178 of the Regulations is hereby inserted after Part 177 of the Regulations:

"PART 178: AERONAUTICAL ASSESSMENT OF AVIATION OBSTACLES

List of regulations

SUBPART 1: GENERAL

178.01.1 Applicability
178.01.2 Requirement for approval
178.01.3 Inspection of aeronautical assessment of aviation obstacles approval
178.01.4 Register of approvals

SUBPART 2: APPROVAL OF AERONAUTICAL ASSESSMENT OF AVIATION OBSTACLES

178.02.1 Manual of procedure
178.02.2 Quality assurance system
178.02.3 Personnel requirements
178.02.4 Minimum requirements for competent persons
178.02.5 Application for issuing or amendment approval
178.02.6 Issuing of approval
178.02.7 Period of validity
178.02.8 Renewal of approval
178.02.9 Duties of holder of approval
178.02.10 Documents and records
178.02.11 Standards and requirements

SUBPART 1: GENERAL

Applicability

178.01.1 This part applies to –

(a) approval of aeronautical assessment of aviation obstacles; and

(b) approval and operation of organisations and persons conducting aeronautical assessment of aviation obstacles.

Requirement for approval

178.01.2 A person shall not conduct aeronautical assessment of aviation obstacles except under the authority of, and in accordance with the provisions of –

(a) an aeronautical assessment of aviation obstacles approval issued under this Part; or

(b) a flight procedure design approval issued under Part 173.

Inspection of aeronautical assessment of aviation obstacles approval

178.01.3 A holder of an aeronautical assessment of aviation obstacles approval shall produce an original approval or certified copy thereof to an authorised officer, inspector or authorised person if so requested by such officer, inspector or person for inspection.

Register of approvals

178.01.4 (1) The Director shall maintain a register of all aeronautical assessment of aviation obstacles approvals issued in terms of this Part.

(2) A register referred to in sub-regulation (1) shall contain the following particulars:

(a) full name of the holder of the approval;

(b) postal or electronic address of the holder of the approval;

(c) date on which an approval was issued or renewed;

(d) full name of the competent person; and

(e) nationalities of the holder of the approval and the competent person.

(3) The particulars referred to in sub-regulation (2) shall be recorded in the register within seven days from the date on which the approval is issued.

(4) A register shall be kept in a safe place at the office of the Authority.

(5) A copy of a register shall be furnished by the Director, on payment of the appropriate fee as prescribed in Part 187, to any person who requests a copy.

SUBPART 2: APPROVAL OF AERONAUTICAL ASSESSMENT OF AVIATION OBSTACLES

Manual of procedure

178.02.1 (1) An applicant for the issuing of an aeronautical assessment of aviation obstacles approval shall provide the Director with its manual of procedure which complies with the requirements prescribed in this Subpart and contains the information prescribed in Document SA-CATS 178.

(2) A holder of an aeronautical assessment of aviation obstacles approval shall—

(a) keep a manual of procedure in a readily accessible form and format;

(b) ensure that each amendment to its manual of procedure meets the applicable requirements of this Part;

(c) comply with the amendment procedures contained in its manual of procedure.

(3) A holder of an aeronautical assessment of aviation obstacles approval who intends to change any part of its manual of procedure shall apply to and obtain the prior approval of the Director before effecting such change.

(4) The Director may specify conditions under which a holder of an aeronautical assessment of aviation obstacles approval shall operate during or following any changes applied for as referred to in sub-regulation (3), to ensure continued compliance with the requirements of this Part.

(5) If any change to a manual of procedure referred to in this regulation requires an amendment to an aeronautical assessment of aviation obstacles approval, a holder thereof shall forward such approval to the Director immediately after the amended manual of procedure has been issued.

(6) A holder of an aeronautical assessment of aviation obstacles approval shall make such amendments to its manual of procedure which the Director may deem necessary in the interests of aviation safety.

Quality assurance system

178.02.2 (1) An applicant for an aeronautical assessment of aviation obstacles approval shall establish a quality assurance system for the control and supervision of services covered by the application.

(2) The minimum standards for a quality assurance system shall be as prescribed in Document SA-CATS 178.

Personnel requirements

178.02.3 (1) A holder of an aeronautical assessment of aviation obstacles approval shall engage or employ a competent person, to whom contractual authority and responsibility is granted to ensure that all aeronautical assessment activities undertaken are carried out in accordance with the applicable requirements prescribed in this Subpart.

(2) A competent person referred to in sub-regulation (1) shall be vested with–

(a) right to access aeronautical assessment work performed or aeronautical assessment activities undertaken by or on behalf of a holder of an aeronautical assessment of aviation obstacles approval;

(b) powers to report directly to the management of a holder of an aeronautical assessment of aviation obstacles approval;

(c) a duty to establish liaison mechanisms with the Director with a view to ascertain correct manners of compliance with the requirements prescribed in this Subpart and interpretations of such requirements by the Director; and

(d) a duty to ensure that any aeronautical assessment of aviation obstacles covered by the approval is performed as prescribed in this Part.

Minimum requirements for competent persons

178.02.4 (1) A competent person referred to in regulation 178.02.3 shall –

(a) satisfy the minimum requirements prescribed in Document SA-CATS 178; and
(b) have passed appropriate competency assessment requirements as prescribed in Document SA-CATS 178.

(2) A person who fails a competency assessment referred to in sub-regulation (1) may apply for re-assessment after appropriate period as prescribed in Document SA-CATS 178.

Application for issuing or amendment of approval

178.02.5 An application for the issuing an aeronautical assessment of aviation obstacles approval, or an amendment thereof shall be made to the Director in the appropriate prescribed form and accompanied by –
(a) appropriate fee as prescribed in Part 187; and
(b) manual of procedure referred to in regulation 178.02.1.

Issuing of approval

178.02.6 (1) The Director may issue an aeronautical assessment of aviation obstacles approval if the Director is satisfied that –
(a) an applicant meets the requirements prescribed in this Part;
(b) a competent person of an applicant satisfies all the requirements prescribed in regulations 178.02.3 and 178.02.4;
(c) granting of the approval is not contrary to the interests of aviation safety.

(2) An aeronautical assessment of aviation obstacles approval referred to in sub-regulation (1) shall contain –
(a) full name of the holder;
(b) competent person's full name;
(c) any condition applicable to the approval;
(d) the date when the approval becomes effective; and
(e) any other information that the Director deems necessary.

(3) The Director may issue a replacement aeronautical assessment of aviation obstacles approval on payment of the appropriate fee as prescribed in Part 187, in the event that an original approval is lost or destroyed.

Period of validity

178.02.7 (1) An aeronautical assessment of aviation obstacles approval is valid for one year, calculated from the date of issuing or renewal thereof.

(2) An aeronautical assessment of aviation obstacles approval shall remain in force until it expires, suspended or cancelled in terms of the regulations.

(3) A holder of an aeronautical assessment of aviation obstacles approval shall forthwith surrender an approval to the Director upon its expiry.

(4) A holder of an aeronautical assessment of aviation obstacles approval which is suspended shall forthwith produce the approval to the authorised officer, inspector or authorised person concerned for the appropriate endorsement.

(5) A holder of an aeronautical assessment of aviation obstacles approval which is cancelled, shall, within 30 days from the date on which the approval is cancelled, surrender such approval to the Director.

Renewal of approval

178.02.8 (1) An application for the renewal of an aeronautical assessment of aviation obstacles approval, shall be made to the Director on the appropriate prescribed form and accompanied by –

(a) appropriate fee as prescribed in Part 187; and

(b) manual of procedure referred to in regulation 178.02.1.

(2) A holder of an aeronautical assessment of aviation obstacles approval shall, at least 90 days immediately preceding the date on which such approval expires, apply to the Director for the renewal of such approval.

Duties of an aeronautical assessment of aviation obstacles approval holder

178.02.9 (1) A holder of an aeronautical assessment of aviation obstacles approval shall –

(a) keep a complete and current copy of its manual of procedures;

(b) comply with all procedures detailed in the manual of procedures;

(c) make its manual of procedures available to the personnel who require it to carry out their duties;

(d) continue to comply with the appropriate requirements prescribed in this Part; and

(e) ensure that aeronautical assessments are conducted in accordance with appropriate standards and requirements as prescribed in regulation 178.02.11.

(2) In performing aeronautical assessment of aviation obstacles, the holder of an aeronautical assessment of aviation obstacles approval shall –

(a) assess aviation obstacles according to the standards and requirements prescribed in regulation 178.02.11 and prepare a report thereof;

(b) submit report referred to in paragraph (a) to the Director together with the appropriate fee prescribed in Part 187; and

(c) adhere to the issuing of approval process prescribed in regulation 178.02.6.

(3) A holder of an aeronautical assessment of aviation obstacles approval shall apply to the Director for the cancellation of the approval if such holder intends to cease to perform aeronautical assessments of aviation obstacles.

Documents and records

178.02.10 (1) A holder of an aeronautical assessment of aviation obstacles approval, shall –

(a) keep copies of all relevant documents which may be necessary as prescribed in Document SA-CATS 178 –

(i) for specified aeronautical assessment of aviation obstacles conducted by such holder; and

(ii) to determine compliance with appropriate requirements prescribed in this Subpart; and

(b) establish procedures to control documents referred to in paragraph (a).

(2) A holder of an aeronautical assessment of aviation obstacles approval shall establish procedures to identify, collect, index, store and maintain all records which may be necessary –

(a) for specified aeronautical assessment of aviation obstacles conducted by such holder; and

(b) to determine compliance with the appropriate requirements prescribed in this Subpart.

(3) Procedures referred to in sub-regulation (2) shall be made to ensure that –

(a) a record is kept of each quality control review of a holder of an aeronautical assessment of aviation obstacles approval;

(b) a record is kept of each person who conducts specified aeronautical assessment of aviation obstacles, including particulars of competence assessments of each such person;

(c) all records are legible; and

(d) records are kept for the period specified per type of record as prescribed in Document SA-CATS 178, calculated from the date of the last entry made in such record.

Standards and requirements

178.02.11 A holder of an aeronautical assessment of aviation obstacles approval shall comply with the standards and requirements as prescribed in Document SA-CATS 178.".

Short title and commencement

12. This Amendment is called the Nineteenth Amendment of the Civil Aviation Regulations, 2018 and shall come into operation 30 days after publication in the Government Gazette.